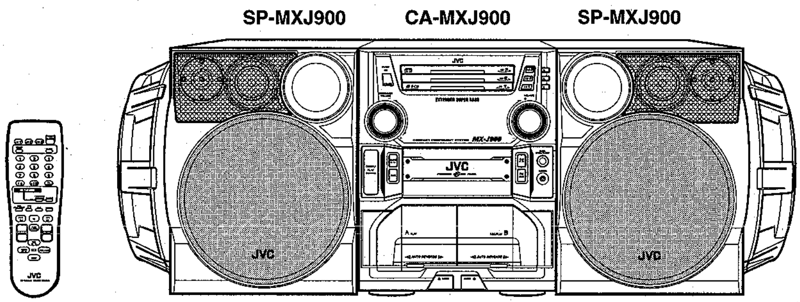
MX-J900
MX-J950R

JVC

SERVICE MANUAL

COMPACT COMPONENT SYSTEM

MX-J900
MX-J950R



This Illustration is MX-J900

Area Suffix	
J	U.S.A.
C	Canada
B	U.K.
E	Continental Europe
EN	Northern Europe
U	Other Areas

COMPACT DISC DIGITAL AUDIO

RDS EON
Only MX-J950R(B/E/EN)

Each difference point

Model	CD/DECK/RECEIVER	SPEAKER	RDS	MIC	Packing method
MX-J900(J/C)	CA-MXJ900	SP-MXJ900	—	—	together
MX-J900(U)	CA-MXJ900	SP-MXJ900	—	○	another
MX-J950R(B/E/EN)	CA-MXJ950R	SP-MXJ950R	○	—	another

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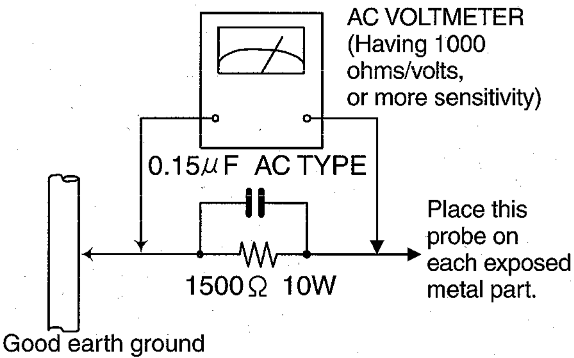
No.20820
Mar. 2000

Safety Precautions

1. This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.
2. Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.
3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.
4. The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after re-assembling.
5. Leakage current check (Electrical shock hazard testing)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.
   Do not use a line isolation transformer during this check.
   - Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.)
   - Alternate check method
     Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground.
     Measure the AC voltage across the resistor with the AC voltmeter.
     Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



Warning

1. This equipment has been designed and manufactured to meet international safety standards.
2. It is the legal responsibility of the repairer to ensure that these safety standards are maintained.
3. Repairs must be made in accordance with the relevant safety standards.
4. It is essential that safety critical components are replaced by approved parts.
5. If mains voltage selector is provided, check setting for local voltage.

⚠ ***CAUTION*** **Burrs formed during molding may be left over on some parts of the chassis. Therefore, pay attention to such burrs in the case of preforming repair of this system.**

Important for laser products

1.CLASS 1 LASER PRODUCT

2.DANGER : Invisible laser radiation when open and inter lock failed or defeated. Avoid direct exposure to beam.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The compact disc player uses invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

⚠ *CAUTION* **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen.

VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen.

ADVARSEL : Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

ADVARSEL : Usynlig laserstråling ved åpning,når sikkerhetsbryteren er avslott. unngå utsettelse for stråling.

REPRODUCTION AND POSITION OF LABELS

WARNING LABEL

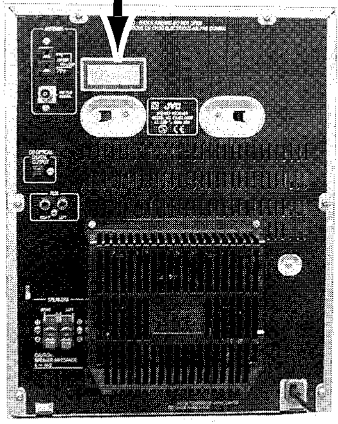
DANGER : Invisible laser radiation when open and interlock or defeated.
AVOID DIRECT EXPOSURE TO BEAM (e)

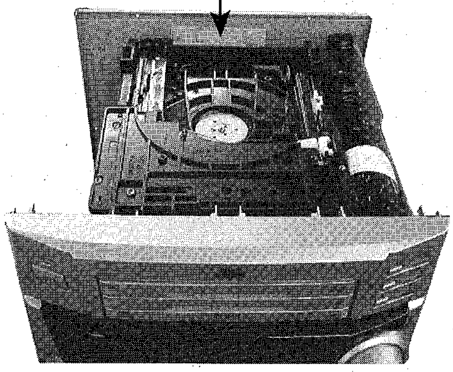
VARO : Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle.Älä katso säteeseen. (d)

VARNING : Osynlig laserstrålning är denna del är öppnad och spårren är urkopplad. Betrakta ej strålen. (s)

ADVARSEL :Usynlig laserstråling ved åbning , når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling. (f)

CLASS 1
LASER PRODUCT





Preventing static electricity

1. Grounding to prevent damage by static electricity

Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

2. About the earth processing for the destruction prevention by static electricity

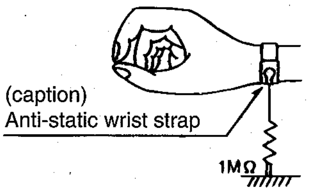
In the equipment which uses optical pick-up (laser diode), optical pick-up is destroyed by the static electricity of the work environment.
Be careful to use proper grounding in the area where repairs are being performed.

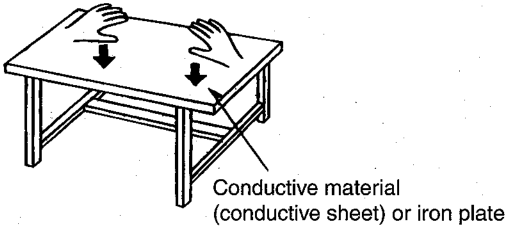
2-1 Ground the workbench

Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

2-2 Ground yourself

Use an anti-static wrist strap to release any static electricity built up in your body.





3. Handling the optical pickup

1. In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)

2. Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

4. Handling the traverse unit (optical pickup)

1. Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.

2. Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.

3. Handle the flexible cable carefully as it may break when subjected to strong force.

4. It is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it

Attention when traverse unit is decomposed

***Please refer to "Disassembly method" in the text for pick-up and how to detach the CD traverse mechanism.**

1. Remove the disk stopper and T. bracket on the CD changer mechanism assembly.
2. Disconnect the harness from connector on the CD motor board.
2. CD traverse unit is put up as shown in Fig.1.
3. Solder is put up before the card wire is removed from connector CN601 on the CD servo control board as shown in Fig. 2.
(When the wire is removed without putting up solder, the CD pick-up assembly might destroy.)
4. Please remove solder after connecting the card wire with CN601 when you install picking up in the substrate.

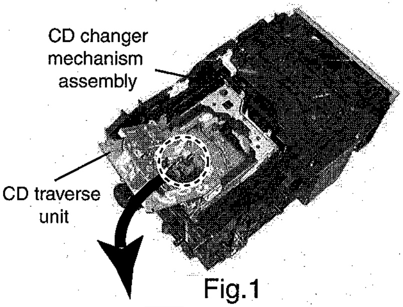


Fig.1

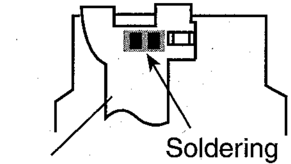
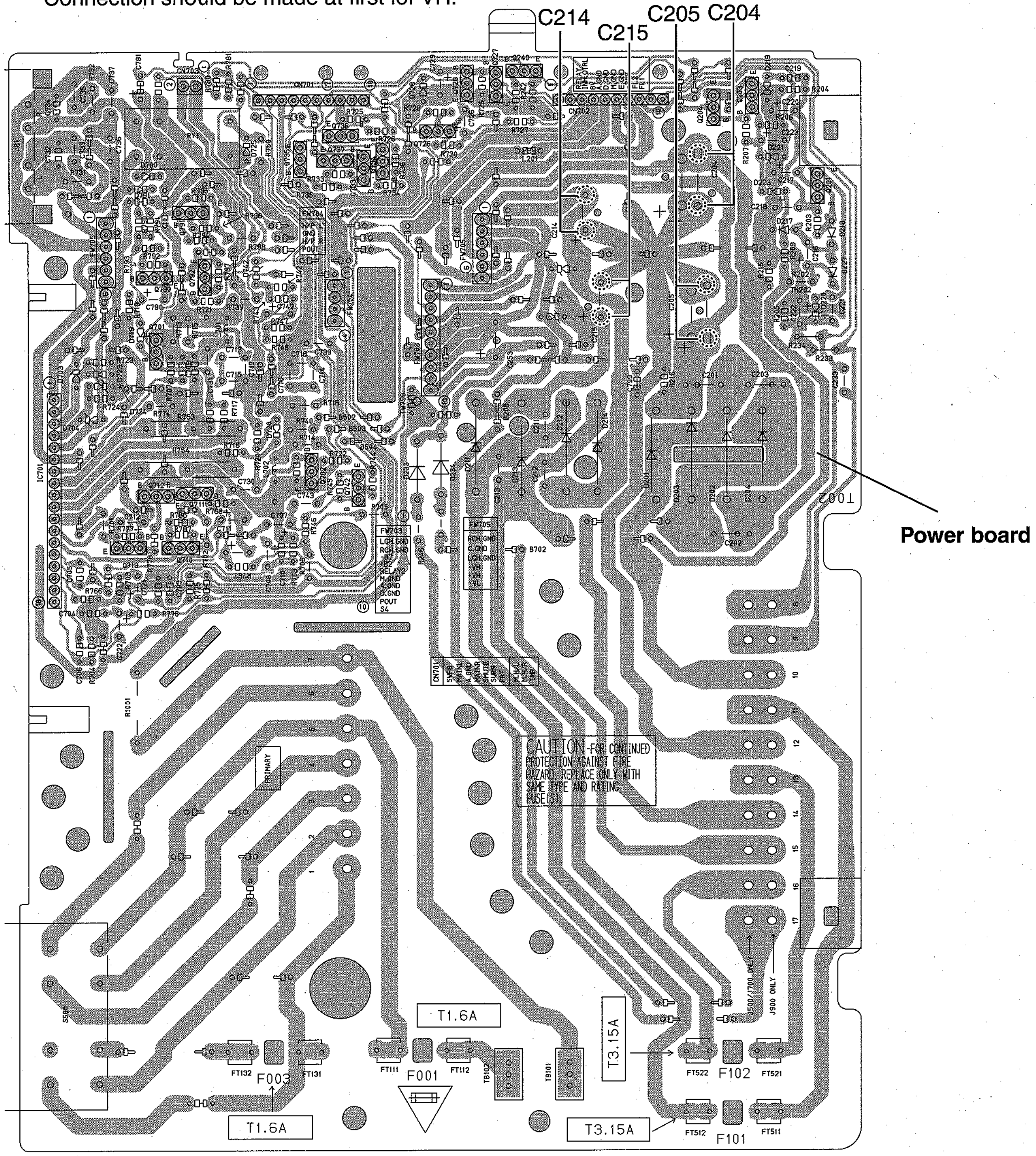


Fig.2

Precautions at disassembling and parts replacement

This model is charged with electricity on the power board even if the power cord is unplugged. Therefore, always discharge electricity in accordance with the steps given below before starting disassembling of the unit and/or replacement of parts.

1. While referring to the disassembling steps, remove the metal cover and the CD changer mechanism.
2. Set electrical resistances of 1kohm, 1/4W to the places between the + and - terminals of condensers VH(C204, C205) and VL(C214, C215) on the power board, and discharge electricity for 4 ~ 5 seconds. Connection should be made at first for VH.


C214
C215
C205
C204
Power board
CAUTION-FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATING FUSE(S).
T1.6A
F001
F003
T1.6A
T3.15A
F102
F101
T3.15A
PRIMARY

Instructions(CA-MXJ950R)

JVC
VICTOR COMPANY OF JAPAN, LIMITED

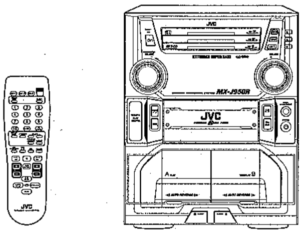
EN, GE, FR, NL, SP, IT

0200MWMMDWJEM

JVC

COMPACT COMPONENT SYSTEM
KOMPAKT-KOMPONENTEN-SYSTEM
SYSTEME DE COMPOSANTS COMPACT
KOMPACTO KOMPONENTEN-SYSTEEM
SISTEMAS DE COMPONENTES COMPACTOS
IMPIANTO A COMPONENTI COMPATTO

CA-MXJ950R



COMPACT disc DIGITAL AUDIO

RDS

INSTRUCTIONS
BEDIENUNGSANLEITUNG
MANUEL D'INSTRUCTIONS
GEBRUIKSAANWIJZING
MANUAL DE INSTRUCCIONES
ISTRUZIONI

For Customer Use:
Enter below the Model No. and Serial No. which are located either on the rear, bottom or side of the cabinet. Retain this information for future reference.

Model No. ______________________

Serial No. ______________________

GVT0037-006A
[E]

Warnings, Cautions and Others / Warnung, Achtung und sonstige Hinweise / Mises en garde, précautions et indications diverses / Waarschuwingen, voorzorgen en andere mededelingen / Avisos, precauciones y otras notas / Avvertenze e precauzioni da osservare

IMPORTANT for the U.K.

DO NOT cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or consult your dealer.

BE SURE to replace the fuse only with an identical approved type, as originally fitted.

If nonetheless the mains plug is cut off ensure to remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

If this product is not supplied fitted with a mains plug then follow the instructions given below:

IMPORTANT:

DO NOT make any connection to the terminal which is marked with the letter E or by the safety earth symbol or coloured green or green-and-yellow.

The wires in the mains lead on this product are coloured in accordance with the following code:

Blue :	Neutral
Brown :	Live

As these colours may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.

The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

IF IN DOUBT - CONSULT A COMPETENT ELECTRICIAN.

Per l'Italia:
"Si dichiara che il questo prodotto di marca JVC è conforme alle prescrizioni del Decreto Ministeriale n.548 del 28/08/95 pubblicato sulla Gazzetta Ufficiale della Repubblica Italiana n.301 del 28/12/95."

CAUTION
To reduce the risk of electrical shocks, fire, etc.:
1. Do not remove screws, covers or cabinet.
2. Do not expose this appliance to rain or moisture.

ACHTUNG
Zur Verhinderung von elektrischen Schlägen, Brandgefahr, usw:
1. Keine Schrauben lösen oder Abdeckungen enlfernen und das Gehäuse nicht öffnen.
2. Dieses Gerät weder Regen noch Feuchtigkeit aussetzen.

ATTENTION
Afin d'éviter tout risque d'électrocution, d'incendie, etc.:
1. Ne pas enlever les vis ni les panneaux et ne pas ouvrir le coffret de l'appareil.
2. Ne pas exposer l'appareil à la pluie ni à l'humidité.

VOORZICHTIG
Ter vermindering van gevaar voor brand, elektrische schokken, enz.:
1. Verwijder geen schroeven, panelen of de behuizing.
2. Stel het toestel niet bloot aan regen of vocht.

PRECAUCIÓN
Para reducir riesgos de choques eléctricos, incendio, etc.:
1. No extraiga los tornillos, los cubiertas ni la caja.
2. No exponga este aparato a la lluvia o a la humedad.

ATTENZIONE
Per ridurre il rischio di shock elettrici, incendi, ecc...
1. Non togliete viti, coperchi o la scatola.
2. Non esponete l'apparecchio alla pioggia e all'umidità.

Caution — ⏻/I switch!
Disconnect the mains plug to shut the power off completely. The ⏻/I switch in any position does not disconnect the mains line. The power can be remote controlled.

Achtung — ⏻/I-Schalter!
Den Netzstecker aus der Steckdose ziehen, um die Stromversorgung vollkommen zu unterbrechen. Der Schalter ⏻/I unterbrichet in keiner Stellung die Stromversorgung vollkommen. Die Stromversorgung kann mit der Fernbedienung ein- und ausgeschaltet werden.

Attention — Commutateur ⏻/I!
Déconnecter la fiche de secteur pour couper complètement le courant. Le commutateur ⏻/I ne coupe jamais complètement la ligne de secteur, quelle que soit sa position. Le courant peut être télécommandé.

Voorzichtig — ⏻/I schakelaar!
Om de stroomtoevoer geheel uit te schakelen, trekt u de stekker uit het stopkontakt. Anders zal er altijd een geringe hoeveelheid stroom naar het apparaat lopen, ongeacht de stand van de ⏻/I schakelaar. U kunt het apparaat ook met de afstandsbediening aan- en uitschakelen.

Precaución — Interruptor ⏻/I!
Desconectar el cable de alimentación para desactivar la alimentación totalmente. Cualquier que sea la posición de ajuste del interruptor ⏻/I, la alimentación no es cortada completamente. La alimentación puede ser controlada remotamente.

Attenzione — L'interruttore ⏻/I!
Disinserire la spina del cavo di alimentazione dalla presa della rete elettrica per staccare completamente l'alimentazione. L'interruttore ⏻/I in nessuna posizione stacca la linea di alimentazione elettrica principale. È possibile il controllo remoto dell'alimentazione.

English
Deutsch
Français
Nederlands
Español
Italiano

Caution: Proper Ventilation

To avoid risk of electric shock and fire, and to prevent damage, locate the apparatus as follows:

1 Front:
  No obstructions and open spacing.
2 Sides/ Top/ Back:
  No obstructions should be placed in the areas shown by the dimensions below.
3 Bottom:
  Place on the level surface. Maintain an adequate air path for ventilation by placing on a stand with a height of 10 cm or more.

Achtung: Ausreichende Belüftung

Zur Vermeidung von elektrischen Schlägen, Feuer und sonstigen Schäden sollte das Gerät unter folgenden Bedingungen aufgestellt werden:

1 Vorderseite:
  Hindernisfrei und gut zugänglich.
2 Seiten- und Rückwände:
  Hindernisfrei in allen gegebenen Abständen (s. Abbildung).
3 Unterseite:
  Die Stellfläche muß absolut eben sein. Sorgen Sie für ausreichende Luftzufuhr durch Aufstellung auf einem Stand mit mindestens 10 cm Höhe.

Attention: Aération correcte

Pour prévenir tout risque de décharge électrique ou d'incendie et éviter toute détérioration, installez l'appareil de la manière suivante:

1 Avant:
  Bien dégagé de tout objet.
2 Côtés/dessus/dessous:
  Assurez-vous que rien ne bloque les espaces indiqués sur le schéma ci-dessous.
3 Dessous:
  Posez l'appareil sur une surface plane et horizontale. Veillez à ce que sa ventilation correcte puisse se faire en le plaçant sur un support d'au moins dix centimètres de hauteur.

Voorzichtig: Goede ventilatie vereist

Om brand, elektrische schokken en beschadiging te voorkomen, moet u het toestel als volgt opstellen:

1 Voorkant:
  Geen belemmeringen en voldoende ruimte.
2 Zijkanten/boven-/onderkant:
  Geen belemmeringen plaatsen in de hieronder aangegeven zones.
3 Onderkant:
  Op vlakke ondergrond plaatsen. Voldoende ventilatieruimte voorzien door het toestel op een onderstel met een hoogte van 10 cm of meer te plaatsen.

Precaución: ventilación correcta

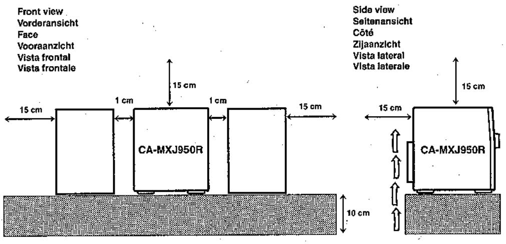
Para evitar el riesgo de descargas eléctricas e incendio y prevenir posibles daños, instale el equipo en un lugar que cumpla los siguientes requisitos:

1 Parte frontal:
  Sin obstrucciones, espacio abierto.
2 Lados/parte superior/parte posterior:
  No debe haber ninguna obstrucción en las áreas mostradas por las dimensiones de la siguiente figura.
3 Parte inferior:
  Sitúe el equipo sobre una superficie nivelada. Mantenga un espacio adecuado para permitir el paso del aire y una correcta ventilación, situando el equipo sobre un soporte de 10 o más cm de altura.

Attenzione: Per una corretta ventilazione

Per prevenire il rischio di scosse elettriche e di incendio ed evitare possibili danni, collocare le apparecchiature nel modo seguente:

1 Parte anteriore:
  Nessun ostacolo e spazio libero.
2 Lati/Parte superiore/Retro:
  Lasciare libere le zone indicate dalle dimensioni di seguito.
3 Base:
  Collocare su una superficie piana. Consentire un'adeguata ventilazione dell'impianto appoggiandolo su un tavolinetto alto almeno 10 cm.



IMPORTANT FOR LASER PRODUCTS / WICHTIGER HINWEIS FÜR LASER-PRODUKTE / IMPORTANT POUR LES PRODUITS LASER / BELANGRIJKE INFORMATIE VOOR LASERPRODUKTEN / IMPORTANTE PARA LOS PRODUCTOS LÁSER / IMPORTANTE PER I PRODOTTI LASER

REPRODUCTION OF LABELS/ANBRINGUNGSORTE FÜR LASER-PRODUKTE/REPRODUCTION DES ETIQUETTES/VERKLARING VAN DE LABELS/REPRODUCCIÓN DE ETIQUETAS/RIPRODUZIONE DELLE ETICHETTE

① CLASSIFICATION LABEL, PLACED ON REAR ENCLOSURE
① KLASSIFIKATIONSETIKETTE AN DER RÜCKSEITE
① ETIQUETTE DE CLASSIFICATION, PLACÉE A L'ARRIÈRE DU COFFRET
① KLASSIFIKATIELABEL, OP DE ACHTERZIJDE VAN HET APPARAAT
① ETIQUETA DE CLASIFICACIÓN, PEGADA EN LA PARTE POSTERIOR DE LA CAJA
① ETICHETTA DI CLASSIFICAZIONE, SITUATA SUL RIVESTIMENTO POSTERIORE

② WARNING LABEL, PLACED INSIDE THE UNIT
② WARNETIKETTE IM GERÄTEINNEREN
② ETIQUETTE D'AVERTISSEMENT PLACÉE À L'INTERIEUR DE L'APPAREIL
② WAARSCHUWINGSLABEL, IN HET APPARAAT
② ETIQUETA DE ADVERTENCIA, PEGADA EN EL INTERIOR DE LA UNIDAD
② ETICHETTA DI AVVERTENZA, SITUATA ALL'INTERNO DELL'APPARECCHIO

CLASS 1
LASER PRODUCT

DANGER: Invisible laser radiation when open and interlock failed or defeated. AVOID DIRECT EXPOSURE TO BEAM. (e)

VARNING: Osynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Betrakta ej strålen. (s)

ADVARSEL: Usynlig laserstråling ved åbning, når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling (d)

VARO: Avattaessa ja suojalukitus ohitettaessa olet alttiina näkymättömälle lasersäteilylle. Älä katso säteeseen. (f)

1. CLASS 1 LASER PRODUCT
2. **DANGER**: Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.
3. **CAUTION**: Do not open the top cover. There are no user serviceable parts inside the Unit; leave all servicing to qualified service personnel.

1. LASER-PRODUKT DER KLASSE 1
2. **GEFAHR:** Unsichtbare Laserstrahlung bei Öffnung und fehlerhafter oder beschädigter Spre. Direkten Kontakt mit dem Strahl vermeiden!
3. **ACHTUNG:** Das Gehäuse nicht öffnen. Das Gerät enthält keinerlei Teile, die vom Benutzer gewartet werden können. Überlassen Sie Wartungsarbeiten bitte qualifizierten Kundendienst-Fachleuten.

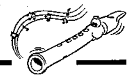
1. PRODUIT LASER CLASSE 1
2. **ATTENTION:** Radiation laser invisible quand l'appareil est ouvert ou que le verrouillage est en panne ou désactivé. Eviter une exposition directe au rayon.
3. **ATTENTION:** Ne pas ouvrir le couvercle du dessus. Il n'y a aucune pièce utilisable à l'intérieur. Laisser à un personnel qualifié le soin de réparer votre appareil.

1. KLAS 1 LASERPRODUKT
2. **GEVAARLIJK:** Onzichtbare laserstraling wanneer open en de beveiliging faalt of uitgeschakeld is. Voorkom het direkt blootstaan aan de straal.
3. **VOORZICHTIG:** De bovenkap niet openen. Binnenin het toestel bevinden zich geen door de gebruiker te repareren onderdelen: laat onderhoud over aan bekwaam vakpersoneel.

1. PRODUCTO LASER CLASE 1
2. **PELIGRO:** En el interior hay radiación láser invisible. Evite el contacto directo con el haz.
3. **PRECAUCIÓN:** No abra la tapa superior. En el interior de la unidad no existen piezas reparables por el usuario; deje todo servicio técnico en manos de personal calificado.

1. PRODOTTO LASER CLASSE 1
2. **PERICOLO:** Radiazione laser invisibile quando l'apparecchio è aperto ed il dispositivo di sicurezza è guasto o disattivato. Evitare l'esposizione diretta ai raggi.
3. **ATTENZIONE:** Non aprire il coperchio superiore. Non vi sono parti adoperabili dall'utente all'interno di questo apparecchio; lasciare tutti i controlli a personale qualificato.

Introduction



We would like to thank you for purchasing one of our JVC products. Before operating this unit, read this manual carefully and thoroughly to obtain the best possible performance from your unit, and retain this manual for future reference.

About This Manual

This manual is organized as follows:

- **The manual mainly explains operations using the buttons and controls on the unit. You can also use the buttons on the remote control if they have the same or similar names (or marks) as those on the unit.**
  If operation using the remote control is different from that using the unit, it is then explained.
- Basic and common information that is the same for many functions is grouped in one place, and is not repeated in each procedure. For instance, we do not repeat the information about turning on/off the unit, setting the volume, changing the sound effects, and others, which are explained in the section "Common Operations" on pages 9 to 11.
- The following marks are used in this manual:

Gives you warnings and cautions to prevent damage or risk of fire/electric shock.
Also gives you information which is not good for obtaining the best possible performance from the unit.

Gives you information and hints you had better know.

Precautions

Installation

- Install in a place which is level, dry and neither too hot nor too cold — between 5°C (41°F) and 35°C (95°F).
- Install the unit in a location with adequate ventilation to prevent internal heat built-up in the unit.
- Leave sufficient distance between the unit and the TV.
- Keep the speakers away from the TV to avoid interference with TV.

DO NOT install the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or vibration.

Power sources

- When unplugging from the wall outlet, always pull the plug, not the AC power cord.

DO NOT handle the AC power cord with wet hands.

Moisture condensation

Moisture may condense on the lens inside the unit in the following cases:

- After starting heating in the room
- In a damp room
- If the unit is brought directly from a cold to a warm place

Should this occur, the unit may malfunction. In this case, leave the unit turned on for a few hours until the moisture evaporates, unplug the AC power cord, and then plug it in again.

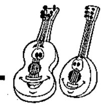
Others

- Should any metallic object or liquid fall into the unit, unplug the unit and consult your dealer before operating any further.
- If you are not going to operate the unit for an extended period of time, unplug the AC power cord from the wall outlet.

DO NOT disassemble the unit since there are no user serviceable parts inside.

If anything goes wrong, unplug the AC power cord and consult your dealer.

Contents



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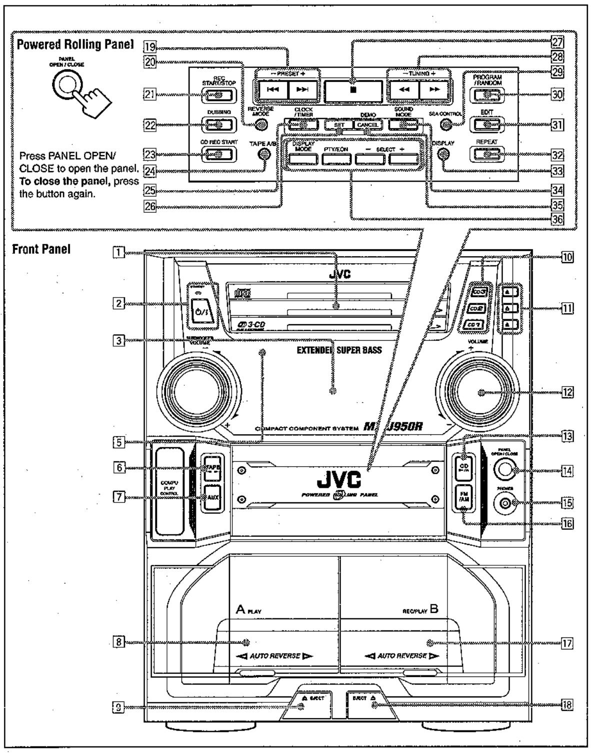
Location of the Buttons and Controls

Become familiar with the buttons and controls on your unit.

Front Panel


Powered Rolling Panel
PANEL OPEN/CLOSE
REC START/STOP
DUBBING
CD REC START
REVERSE MODE
TAPE A/B
CLOCK /TIMER
SET
CANCEL
DEMO
SOUND MODE
SEA CONTROL
DISPLAY MODE
PTY/EON
– SELECT +
– PRESET +
– TUNING +
PROGRAM /RANDOM
EDIT
DISPLAY
REPEAT
Front Panel
JVC
3CD
EXTENDED SUPER BASS
VOLUME
COMPACT COMPONENT SYSTEM MX-J950R
TAPE
AUX
CD
FM /AM
PHONES
A PLAY
REC/PLAY B
AUTO REVERSE
EJECT
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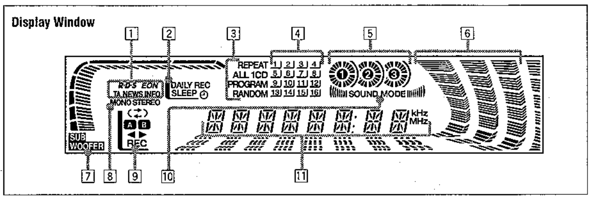
36

Press PANEL OPEN/ CLOSE to open the panel. **To close the panel**, press the button again.

Continued

Display Window


1
2
3
4
5
6
RDS EON
TA NEWS INFO
DAILY REC
SLEEP
REPEAT
ALL 1CD
PROGRAM
RANDOM
SOUND MODE
MONO STEREO
A B
REC
SUB WOOFER
kHz
MHz
7
8
9
10
11

See pages in the parentheses for details.

Front Panel

- 1 Disc trays
- 2 ⏻/I (Standby/On) button and STANDBY lamp (9)
- 3 Display window
- 4 SUBWOOFER VOLUME control (10)
- 5 Remote sensor
- 6 TAPE ◄► button and lamp (9, 18)
  Pressing this button also turns on the unit.
- 7 AUX button and lamp (9)
  Pressing this button also turns on the unit.
- 8 Deck A cassette holder (18)
- 9 ▲ EJECT button for deck A (18)
- 10 Disc number buttons (CD1, CD2, and CD3) (15)
  Pressing one of these buttons also turns on the unit.
- 11 ▲ (CD tray open/close) buttons (15)
  Pressing one of these buttons also turns on the unit.
- 12 VOLUME control (10)
- 13 CD ►/❚❚ (play/pause) button and lamp (9, 15)
  Pressing this button also turns on the unit.
- 14 PANEL OPEN/CLOSE button (9)
  Pressing this button also turns on the unit.
- 15 PHONES jack (10)
- 16 FM/AM button and lamp (9, 12)
  Pressing this button also turns on the unit.
- 17 Deck B cassette holder (18, 19)
- 18 EJECT ▲ button for deck B (18, 19)

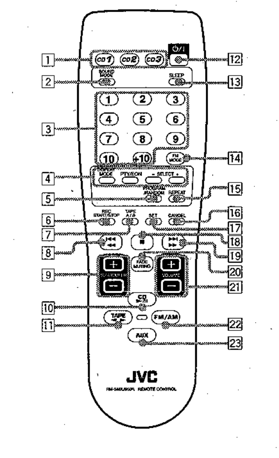
Powered Rolling Panel

- 19 PRESET – / + buttons (12)
  |◄◄ / ►►| (reverse search/forward search) buttons (9, 11, 16, 21 – 24)
- 20 REVERSE MODE button (18 – 21)
- 21 REC START/STOP button (19, 21)
- 22 DUBBING button (20)
- 23 CD REC START button (20, 21)
- 24 TAPE A/B button (18)
- 25 CLOCK/TIMER button (9, 22 – 24)
- 26 SET button (9, 12, 16, 21 – 24)
- 27 ■ (stop) button (15 – 21)
- 28 TUNING – / + buttons (12)
  ◄◄ / ►► (fast left/fast right) buttons (11, 16, 18)
- 29 SEA CONTROL button (11)
- 30 PROGRAM/RANDOM button (16, 17, 20)
- 31 EDIT button (21)
- 32 REPEAT button (17)
- 33 DISPLAY button (9)
- 34 SOUND MODE button (10)
- 35 CANCEL button (9, 17, 22)
  DEMO button (8)
- 36 RDS operation buttons (13)
  - DISPLAY MODE, PTY/EON, and SELECT – / + buttons

Display window

- 1 RDS operation indicators
  - RDS, EON, and TA/NEWS/INFO indicators
- 2 Timer indicators
  - DAILY (Daily Timer), REC (Recording Timer), SLEEP, and ⏲ (Timer) indicators
- 3 CD play mode indicators
  - REPEAT (ALL/1CD/1), PROGRAM, and RANDOM indicators
- 4 CD track number indicators
- 5 Disc indicators
- 6 Audio level indicator
  SEA (Sound Effect Amplifier) pattern indicator
- 7 SUBWOOFER indicator (10)
- 8 Tuner operation indicators
  - MONO and STEREO indicators
- 9 Tape operation indicators
  - (⇄) (reverse mode), A/B (operating deck), ◄► (tape direction), and REC (recording) indicators
- 10 SOUND MODE indicator
- 11 Main display
  - Shows the source name, frequency, etc.

Remote Control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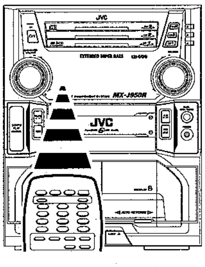
JVC


JVC
MX-J950R

When using the remote control, point it at the remote sensor on the front panel.

Remote Control

- 1 Disc number buttons (CD1, CD2, and CD3) (15)
  Pressing one of these buttons also turns on the unit.
- 2 SOUND MODE button (10)
- 3 Number buttons (12, 16)
- 4 RDS operation buttons (13)
  - DISPLAY MODE, PTY/EON, and SELECT – / + buttons
- 5 PROGRAM/RANDOM button (16, 17, 20)
- 6 REC START/STOP button (19, 21)
- 7 TAPE A/B button (18)
- 8 ◄◄ / |◄◄ (fast left/reverse search) button (16 – 18)
- 9 SUBWOOFER + / – buttons (10)
- 10 CD ►/❚❚ button (9, 15)
  Pressing this button also turns on the unit.
- 11 TAPE ◄ ► button (9, 18)
  Pressing this button also turns on the unit.
- 12 ⏻/I (Standby/On) button (9)
- 13 SLEEP button (24)
- 14 FM MODE button (12)
- 15 REPEAT button (17)
- 16 CANCEL button (9, 17, 22)
- 17 SET button (9, 12, 16, 21 – 24)
- 18 ■ (stop) button (15 – 21)
- 19 ►►| / ►► (forward search/fast right) button (16 – 18)
- 20 FADE MUTING button (10)
- 21 VOLUME + / – buttons (10)
- 22 FM/AM button (9, 12)
  Pressing this button also turns on the unit.
- 23 AUX button (9)
  Pressing this button also turns on the unit.

Getting Started

Continued

Unpacking

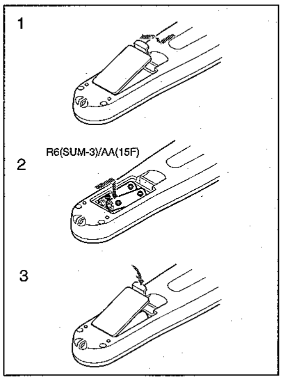
After unpacking, check to be sure that you have all the following items.
The number in the parentheses indicates the quantity of the pieces supplied.

- AM (LW/MW) loop antenna (1)
- FM antenna (1)
- Remote control (1)
- Batteries (2)

If any is missing, consult your dealer immediately.

Putting the Batteries into the Remote Control

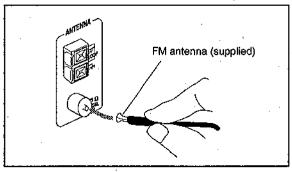
Insert the batteries — R6(SUM-3)/AA(15F) — into the remote control, by matching the polarity (+ and –) on the batteries with the + and – markings on the battery compartment.
When the remote control can no longer operate the unit, replace both batteries at the same time.


1
2
R6(SUM-3)/AA(15F)
3

- DO NOT use an old battery together with a new one.
- DO NOT use different types of batteries together.
- DO NOT expose batteries to heat or flame.
- DO NOT leave the batteries in the battery compartment when you are not going to use the remote control for an extended period of time. Otherwise, it will be damaged from battery leakage.

Connecting Antennas

FM antenna


ANTENNA
FM antenna (supplied)

1 **Attach the FM antenna to the FM 75 Ω COAXIAL terminal.**

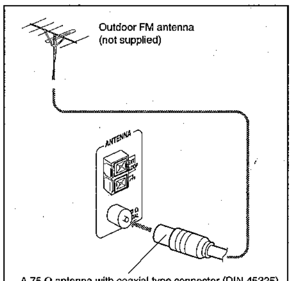
2 **Extend the FM antenna.**

3 **Fasten it up in the position which gives you the best reception, then fix it on the wall, etc.**

notes **About the supplied FM antenna**
The FM antenna supplied with this unit can be used as temporary measure. If reception is poor, you can connect an outdoor FM antenna.

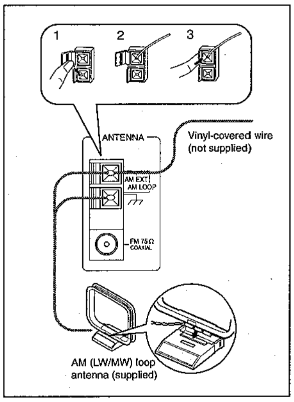
To connect an outdoor FM antenna

Before connecting it, disconnect the supplied FM antenna.


Outdoor FM antenna (not supplied)
ANTENNA

A 75 Ω antenna with coaxial type connector (DIN 45325) should be used.

AM (LW/MW) antenna


1
2
3
ANTENNA
Vinyl-covered wire (not supplied)
AM EXT
AM LOOP
FM 75Ω COAXIAL
AM (LW/MW) loop antenna (supplied)

1 **Connect the AM (LW/MW) loop antenna to the AM LOOP terminals as illustrated.**

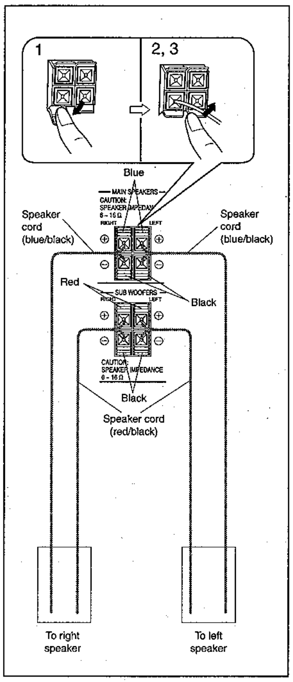
2 **Turn the AM (LW/MW) loop antenna until you have the best reception.**

To connect an outdoor AM (LW/MW) antenna

When reception is poor, connect a single vinyl-covered wire to the AM EXT terminal and extend it horizontally. (The AM (LW/MW) loop antenna must remain connected.)

notes **For better reception of both FM and AM (LW/MW)**
- Make sure the antenna conductors do not touch any other terminals and connecting cords.
- Keep the antennas away from metallic parts of the unit, connecting cords, and the AC power cord.

Connecting Speakers


1
2, 3
Blue
MAIN SPEAKERS
CAUTION: SPEAKER IMPEDANCE 6 - 16Ω
RIGHT
LEFT
Speaker cord (blue/black)
Speaker cord (blue/black)
Red
SUB WOOFERS
Black
CAUTION: SPEAKER IMPEDANCE 6 - 16Ω
Black
Speaker cord (red/black)
To right speaker
To left speaker

1 **Press and hold the clamp of the speaker terminal on the rear of the unit.**

2 **Insert the end of the speaker cord into the terminal.**
Match the polarity (color) of the speaker terminals: ⊕ to ⊕ and ⊖ to ⊖.

3 **Release the finger from the clamp.**

IMPORTANT: Use only speakers with the same speaker impedance as indicated by the speaker terminals on the rear of the unit.

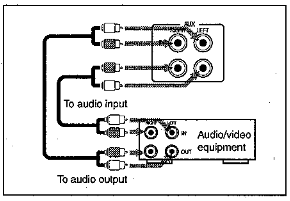
Connecting Other Equipment

You can connect both analog and digital equipment.

STOP
- DO NOT connect any equipment while the power is on.
- DO NOT plug in any equipment until all connections are complete.

To connect an analog component

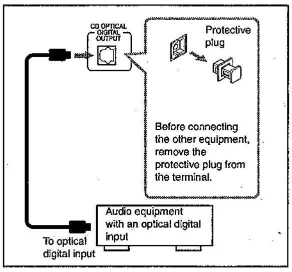
Be sure that the plugs of the audio cords are color coded: White plugs and jacks are for left audio signals, and red ones for right audio signals.


AUX
RIGHT
LEFT
To audio input
RIGHT
LEFT
IN
OUT
Audio/video equipment
To audio output

By using audio cords (not supplied), connect:
- Between the audio input jacks on the other equipment and AUX OUT jacks: For recording on the other equipment.
- Between the audio output jacks on the other equipment and AUX IN jacks: For playing the other equipment.

To connect audio equipment with an optical digital input terminal

You can record CD sound onto the connected digital equipment.


CD OPTICAL DIGITAL OUTPUT
Protective plug
Before connecting the other equipment, remove the protective plug from the terminal.
Audio equipment with an optical digital input
To optical digital input

Connect an optical digital cord (not supplied) between the optical digital input terminal on the other equipment and the CD OPTICAL DIGITAL OUTPUT terminal.

NOW, you can plug in the unit and other connected equipment FINALLY!

When connecting the AC power cord into a wall outlet, the unit automatically starts display demonstration.

To stop the display demonstration, press any button on the unit or on the remote control.

To start the display demonstration manually

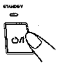
Press and hold DEMO for more than 2 seconds.

To stop the demonstration, press any button.

Common Operations

Turning On or Off the Power

To turn on the unit, press ⏻/| so that the STANDBY lamp goes off.



WELCOME

The Powered Rolling Panel opens automatically.

To turn off the unit (on standby), press ⏻/| again so that the STANDBY lamp lights up.

GOOD BYE

The Powered Rolling Panel also closes.
A little power is always consumed even while the unit is on standby.

To switch off the power supply completely, unplug the AC power cord from the AC outlet.

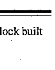
notes **When you unplug the AC power cord or if a power failure occurs**
The clock is reset to "0:00" right away, while the tuner preset stations (see page 12) will be erased in a few days.

Setting the Clock

Before operating the unit any further, first set the clock built in this unit.

On the unit ONLY:

1 **Press PANEL OPEN/CLOSE.**
The unit is turned on and the Powered Rolling Panel opens automatically.


PANEL OPEN/CLOSE

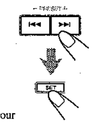
2 **Press CLOCK/TIMER.**

CLOCK /TIMER

0:00

The hour digits start flashing on the display.

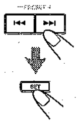
3 **Press |◀◀ or ▶▶| to adjust the hour, then press SET.**



19:00

- If you want to correct the hour after pressing SET, press CANCEL. The hour digits start flashing again.

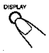
4 **Press |◀◀ or ▶▶| to adjust the minute, then press SET.**



CLOCK OK

To check the clock time

Press DISPLAY while playing any source.



- Each time you press the button, the source indication and the clock time alternate on the display.

To adjust the clock again

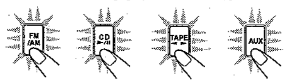
If you have adjusted the clock before, you need to press CLOCK/TIMER repeatedly until the clock setting mode is selected.
- Each time you press the button, the clock/timer setting modes change as follows:

→ DAILY → ON TIME → REC
Canceled ← Clock setting ← ON TIME ←
(The hour digits start flashing.)

notes **If there is a power failure**
The clock loses the setting and is reset to "0:00." You need to set the clock again.

Selecting the Sources

To listen to the FM/AM (LW/MW) broadcasts, press FM/AM. (See page 12.)
To play back CDs, press CD ▶/❚❚. (See pages 15 – 17.)
To play back tapes, press TAPE ◀ ▶. (See page 18.)
To select the external equipment as the source, press AUX.


FM /AM
CD ▶/❚❚
TAPE ◀ ▶
AUX

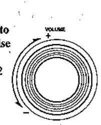
When you press the play button for a particular source (FM/AM, CD ▶/❚❚, AUX, and TAPE ◀ ▶), the unit turns on, and the Powered Rolling Panel opens automatically (and the unit starts playing the source if it is ready — COMPU PLAY CONTROL).

Continued

Adjusting the Volume

You can adjust the volume level only while the unit is turned on.

Turn the VOLUME control clockwise to increase the volume or counterclockwise to decrease it.



- The volume level can be adjusted in 32 steps (MIN, VOL 1 — VOL 30, and MAX).

VOL 15

When using the remote control, press VOLUME + to increase the volume or press VOLUME – to decrease it.

notes **For private listening**
Connect a pair of headphones to the PHONES jack. No sound comes out of the speakers. Be sure to turn down the volume before connecting or putting on headphones.

STOP DO NOT turn off (on standby) the unit with the volume set to an extremely high level; otherwise, a sudden blast of sound can damage your hearing, speakers and/or headphones when you turn on the unit or start playing any source next time. REMEMBER you cannot adjust the volume level while the unit is on standby.

To turn down the volume level temporarily

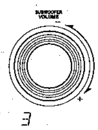
Press FADE MUTING on the remote control.
The volume level gradually decreases to "MIN."
To restore the sound, press the button again.

FADE MUTING

Reinforcing the Bass Sound

The SUBWOOFER VOLUME control provided for this unit can enhance the subwoofer sound if subwoofers are connected to the rear of this unit (see page 7).
This function only affects the playback sound, but does not affect your recording.

Turn the SUBWOOFER VOLUME control clockwise to increase the subwoofer sound or counterclockwise to decrease it.


SUBWOOFER VOLUME
–
+

- The subwoofer level can be adjusted in 8 steps (WOOFER 1 — WOOFER 7, and MAX).

WOOFER 3

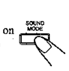
SUBWOOFER indicator always lights up when the unit is on.

When using the remote control, press SUBWOOFER + to increase the subwoofer volume or press SUBWOOFER – to decrease it.

Selecting the Sound Modes

You can select one of the 6 preset sound modes (3 surround modes and 3 SEA — Sound Effect Amplifier — modes). This function only affects the playback sound, but does not affect your recording.

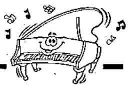
To select the sound modes, press SOUND MODE until the sound mode you want appears on the display. The SOUND MODE indicator also lights up on the display.



D.CLUB

- Each time you press the button, the sound modes change as follows:

→ D.CLUB (Dance CLUB) → HALL → STADIUM → ROCK → POP → CLASSIC → MANUAL 1 → MANUAL 2 → MANUAL 3 → OFF (Canceled) →



Surround modes *:
D.CLUB: Increases resonance and bass.
HALL: Adds depth and brilliance to the sound.
STADIUM: Adds clarity and spreads the sound, like in an outdoor stadium.

SEA (Sound Effect Amplifier) modes:
ROCK: Boosts low and high frequency. Good for acoustic music.
POP: Good for vocal music.
CLASSIC: Good for classical music.

Manual modes:
MANUAL 1/2/3: Your individual mode stored in memory. See "Creating Your Own Sound Mode — Manual Mode."

OFF: Cancels the sound mode.

* Surround elements are added to the SEA elements to create a being-there feeling in your room.
When one of these modes is selected, the SOUND MODE indicator lights up as — ((((SOUND MODE))))

While one of the SEA modes including manual modes (SEA elements without surround elements) is selected, it lights up as — SOUND MODE

Creating Your Own Sound Mode — Manual Mode

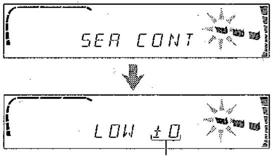
You can change SEA pattern to suit your preference. These changed settings can be stored in the MANUAL 1, 2, and 3 modes.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- **If you want to add the surround elements in your SEA pattern,** select one of the surround modes (D.CLUB, HALL, or STADIUM) before starting the procedure below.

On the unit ONLY:

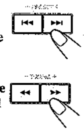
1 Press and hold SEA CONTROL until "SEA CONT" appears on the display.

SEA CONTROL



Current level appears.

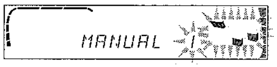
2 Adjust the SEA pattern.



1) **Press ⏮ or ⏭ to select the frequency range to adjust (LOW, MID, HIGH).**
2) **Press ◀◀ or ▶▶ to adjust the level (–3 to +3) of the selected frequency range.**
3) **Repeat steps 1) and 2) to adjust the level of the other frequency ranges.**

3 Press SEA CONTROL again.

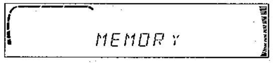
SEA CONTROL



4 Press ⏮ or ⏭ to select one of the MANUAL 1, 2, and 3 modes into which you want to store the SEA pattern.

5 Press SEA CONTROL again.

SEA CONTROL

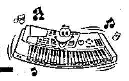


The SOUND MODE indicator also lights up.
The SEA pattern you have created are stored into the MANUAL mode selected in the above step.

To use your own sound mode

Select MANUAL 1, 2, or 3 mode when using the sound modes. See "Selecting the Sound Modes."

Listening to FM and AM (LW/MW) Broadcasts



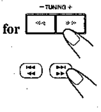
Tuning in a Station

1 Press FM/AM.

The unit automatically turns on and tunes in the previously tuned station (either FM or AM — LW/MW). The Powered Rolling Panel automatically opens.

- Each time you press the button, the band alternates between FM and AM (LW/MW).

2 Start searching for stations.
On the unit:
Press and hold TUNING – / + for more than 1 second.
On the remote control:
Press and hold ◀◀ / ⏮ or ⏭ / ▶▶ for more than 1 second.



The unit starts searching for stations and stops when a station of sufficient signal strength is tuned in. If a program is broadcast in stereo, the STEREO indicator lights up.

To stop during searching, press TUNING – / + (or ◀◀ / ⏮, ⏭ / ▶▶).

When you press TUNING – / + (or ◀◀ / ⏮, ⏭ / ▶▶) briefly and repeatedly
The frequency changes step by step.

To change the FM reception mode

When an FM stereo broadcast is hard to receive or noisy, press FM MODE on the remote control so that the MONO indicator lights up on the display. Reception improves.

To restore the stereo effect, press FM MODE again so that the MONO indicator goes off.
In this stereo mode, you can hear stereo sounds when a program is broadcast in stereo.

Presetting Stations

You can preset 30 FM and 15 AM (LW/MW) stations.
In some cases, test frequencies have been already memorized for the tuner since the factory examined the tuner preset function before shipment. This is not a malfunction. You can preset the stations you want into memory by following the presetting method.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

On the unit ONLY:

1 Tune in the station you want to preset.

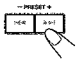
- See "Tuning in a Station."

FM 87.50MHz

2 Press SET.

SET

3 Press PRESET – / + to select a preset number.



P-- 1

4 Press SET again.

STORE 1

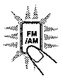
The tuned station in step 1 is stored in the preset number selected in step 3.

- Storing a new station on a used number erases the previously stored one.

When you unplug the AC power cord or if a power failure occurs
The preset stations will be erased in a few days. If this happens, preset the stations again.

Tuning in a Preset Station

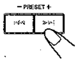
1 Press FM/AM.

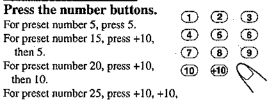


The unit automatically turns on and tunes in the previously tuned station (either FM or AM — LW/MW). The Powered Rolling Panel automatically opens.

- Each time you press the button, the band alternates between FM and AM (LW/MW).

2 Select a preset number.
On the unit:
Press PRESET – / +.
On the remote control:
Press the number buttons.





For preset number 5, press 5.
For preset number 15, press +10, then 5.
For preset number 20, press +10, then 10.
For preset number 25, press +10, +10, then 5.
For preset number 30, press +10, +10, then 10.

Receiving FM Stations with RDS

RDS allows FM stations to send an additional signal along with their regular program signals. For example, the stations send their station names, as well as information about what type of program they broadcast, such as sports or music, etc.

When tuned to an FM station which provides the RDS service, the RDS indicator lights up on the display.

With the unit, you can receive the following types of RDS signals.

PS (Program Service):
Shows commonly known station names.

PTY (Program Type):
Shows types of broadcast programs.

RT (Radio Text):
Shows text messages the station sends.

EON (Enhanced Other Networks):
Provides the information about the types of the programs sent by other RDS stations.

More about RDS

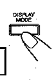
- Some FM stations and AM (LW/MW) stations do not provide RDS signals.
- RDS services vary among FM RDS stations. For details on RDS services in your area, check with local radio stations.
- RDS may not work correctly if the received station is not transmitting the signals properly or if the signal strength is weak.

Changing the RDS Information

You can see RDS information on the display while listening to an FM station.

Press DISPLAY MODE.

- Each time you press the button, the display changes to show the following information:



→ PS → PTY → RT
(Program Service) (Program Type) (Radio Text)
Station frequency ←
(or preset channel no.)

If no PS, PTY, or RT signals are sent by a station
"NO PS," "NO PTY," or "NO RT" appears in the main display.

If the unit takes time to show the RDS information received from a station
"WAIT PS", "WAIT PTY", or "WAIT RT" may appear on the display.

Searching for Programs by PTY Codes (PTY Search)

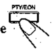
One of the advantages of RDS is that you can locate a particular kind of program by specifying the PTY codes.

- For details on the PTY codes, see "Additional Information" on page 27.

To search for a program using the PTY codes
REMEMBER you must preset FM RDS stations to use the EON function. If not yet done, see page 12.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

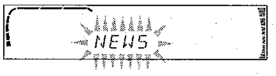
1 Press PTY/EON until "PTY" and "SELECT" alternately appears on the display.



- Each time you press the button, RDS operation mode changes as follows:

→ PTY SELECT → EON SELECT
Canceled ←

2 Press SELECT – / + until the PTY code you want appears on the display.



- Each time you press the button, the PTY codes change as follows:

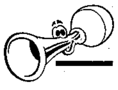
NEWS ⇄ AFFAIRS ⇄ INFO ⇄ SPORT ⇄
EDUCATE ⇄ DRAMA ⇄ CULTURE ⇄
SCIENCE ⇄ VARIED ⇄ POP M ⇄ ROCK M ⇄
M.O.R. M ⇄ LIGHT M ⇄ CLASSICS ⇄
OTHER M ⇄ WEATHER ⇄ FINANCE ⇄
CHILDREN ⇄ SOCIAL A ⇄ RELIGION ⇄
PHONE IN ⇄ TRAVEL ⇄ LEISURE ⇄ JAZZ ⇄
COUNTRY ⇄ NATIONAL ⇄ OLDIES ⇄
FOLK M ⇄ DOCUMENT ⇄ TRAFFIC ⇄
(back to the beginning)

3 Press PTY/EON once again.

While searching, "SEARCH" and the selected PTY code alternate on the display.
The unit searches 30 preset FM stations, stops when it finds the one you have selected ("FOUND" appears), and tunes in that station.

- If no program is found, "NOT" and "FOUND" alternately appears on the display and the unit returns to the last received station.

To stop searching any time during the process
Press PTY/EON while searching.



Switching to a Program Type of Your Choice Temporarily

By receiving EON data sent by FM RDS stations, the EON function allows the unit to switch temporarily to a broadcast program of your choice (TA, NEWS, and INFO) from a different station.

- The EON function only works when you are listening to a preset FM RDS stations providing EON data.
- The EON indicator lights while receiving a station with EON data.

To activate the EON function
REMEMBER you must preset FM RDS stations to use the EON function. If not yet done, see page 12.

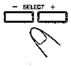
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.

1 Press PTY/EON until "EON" and "SELECT" alternately appear on the display.

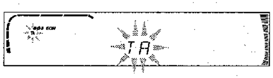
- Each time you press the button, RDS operation mode changes as follows:

→ PTY SELECT → EON SELECT
Canceled ←

2 Press SELECT – / + until the EON data type you want appears on the display.



The selected EON data type indicator also flashes.



- Each time you press the button, the EON data types change as follows:

→ TA ←→ NEWS ←→ INFO ←
→ OFF ←
(Canceled)

TA: Traffic announcement
NEWS: News
INFO: Program the purpose of which is to impart advice in the widest sense.
OFF: The EON function is canceled. The EON data type indicator (TA, NEWS, INFO) goes off.

3 Press PTY/EON once again.

The EON data type indicator stops flashing and remains lit.
Now, the EON function is activated. See "How the EON function actually works."

How the EON function actually works:

CASE 1

If there is no station broadcasting the program you have selected
The unit continues tuning in the current station.
⬇
When a station starts broadcasting the program you have selected, the unit automatically switches to the station. The indicator of received PTY code starts flashing.
⬇
When the program is over, "EON END" appears in the main display, and the unit goes back to the previously tuned station, but the EON function still remains activated.

CASE 2

If there is a station broadcasting the program you have selected
The unit tunes in the program. The indicator of received PTY code starts flashing.
⬇
When the program is over, "EON END" appears in the main display, and the unit goes back to the previously tuned station, but the EON function still remains activated.

CASE 3

If the FM station you are listening to is broadcasting the program you have selected
The unit continues to receive the station but the indicator of received PTY code starts flashing.
⬇
When the program is over, the indicator of received PTY code stops flashing and remains lit, but the EON function still remains activated.

More about the EON function

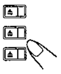
- EON data sent from some stations may not be compatible with this unit. In this case, the EON function may not work correctly.
- While listening to a program tuned in by the EON function, the station does not change even if another network station starts broadcasting a program of the same EON data.
- The EON function is canceled when you change the source to CD, TAPE, or AUX, while it is temporarily canceled when you change the source to AM.

Playing Back CDs

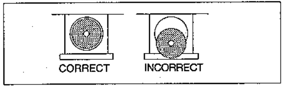
Loading CDs

On the unit ONLY:

1 Press ≜ for the disc tray (CD1 to 3) you want to load a CD onto.
The unit automatically turns on and the disc tray comes out. The Powered Rolling Panel also opens automatically.

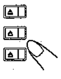


2 Place a disc correctly on the circle of the disc tray, with its label side up.



- When using a CD single (8 cm), place it on the inner circle of the disc tray.

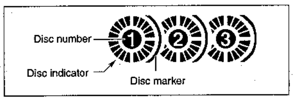
3 Press the same ≜ you have pressed in step 1.
The disc tray closes, and the corresponding disc indicator (CD1 to CD3) lights up on the display.



4 Repeat steps 1 to 3 to place other CDs.

When loading more than one CD continuously
When you press ≜ for the next tray you want to place another CD onto, the first disc tray automatically closes and then the next tray comes out.

About the disc indicators
Each disc indicator corresponds to the disc tray of the same number.



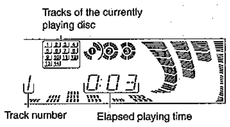
- The disc marker lights up for the disc number you have selected.
- The disc indicator flashes while the corresponding CD is being played.
- The disc indicator goes off when the unit has detected that there is no CD on the corresponding disc tray.

Playing Back the Entire Discs — Continuous Play

You can play CDs continuously.

1 Load CDs.

2 Press one of the disc number buttons (CD1, CD2, and CD3) for the disc you want to play.
CD play starts from the first track of the selected disc.



- Pressing CD ►/II instead of the disc number buttons starts playing back if a CD is on the trays.

To stop during play, press ■.

To remove the disc, press ≜ for the corresponding disc tray.

CD playback sequence
When 3 CDs are loaded on the disc trays, they are played in one of the following sequences.
- When CD1 is pressed : CD1 ⇨ CD2 ⇨ CD3 (then stops)
- When CD2 is pressed : CD2 ⇨ CD3 ⇨ CD1 (then stops)
- When CD3 is pressed : CD3 ⇨ CD1 ⇨ CD2 (then stops)

* When only 2 CDs are loaded, they are played in the same order, but the disc tray without a CD is skipped.

Basic CD Operations

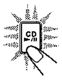
While playing a CD, you can do the following operations.

To exchange CDs during playback of another

Press ≜ corresponding to a CD, not playing or selected currently, to eject and exchange the CD.
If you exchange CDs during play, the current play will not stop until all CDs you have exchanged are played.

To stop play for a moment

Press CD ►/II.
While pausing, the elapsed playing time flashes on the display.



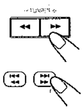
To resume play, press CD ►/II again.

Continued

To locate a particular point in a track

During play, press and hold ◄◄ or ►►.
- ◄◄: Fast reverses the disc.
- ►►: Fast forwards the disc.

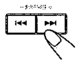
When using the remote control, press and hold ◄◄ / |◄◄ or ►►| / ►►.



To go to another track

Press |◄◄ or ►►| repeatedly before or during playback.
- |◄◄: Goes back to the beginning of the current or previous tracks.
- ►►|: Skips to the beginning of the next or succeeding tracks.

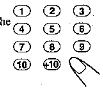
When using the remote control, press ◄◄ / |◄◄ or ►►| / ►►.



If you press and hold |◄◄ / ►►| (or ◄◄ / |◄◄ or ►►| / ►► before playing)
You can change the tracks continuously.

To go to another track directly using the number buttons

Pressing the number button(s) before or during play allows you to start playing the track number you want.
Ex.: For track number 5, press 5.
For track number 15, press +10, then 5.
For track number 20, press +10, then 10.
For track number 32, press +10, +10, +10, then 2.



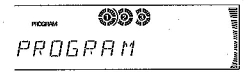
Programming the Playing Order of the Tracks — Program Play

You can arrange the order in which the tracks play before you start playing. **You can program up to 32 tracks.**
- To use Repeat play (see page 17) for Program play, press REPEAT after starting Program play.

1 Load CDs.
- If the current playing source is not the CD player, press CD ►/II, then ■ before going to the next step.

2 Press PROGRAM/RANDOM repeatedly until "PROGRAM" appears on the display.

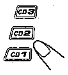
PROGRAM /RANDOM

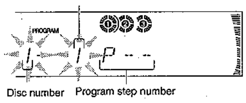


- If a program has been stored in memory, the program is called up.
- Each time you press the button, CD play mode changes as follows:

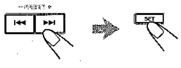
→ Program Play → Random Play → Continuous Play →

3 Press one of the disc number buttons (CD1, CD2, and CD3) to select the disc number you want to play.

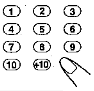


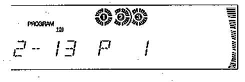


4 Select a track from the CD selected in the above step.
On the unit:
Press |◄◄ or ►►| to select the track number, then press SET.



On the remote control:
Press the number buttons.
- For how to use the number buttons, see "To go to another track directly using the number buttons" described to the left.





5 Program other tracks you want.
- To program tracks from the same disc, repeat step 4.
- To program tracks from a different disc, repeat steps 3 and 4.

6 Press CD ►/II.
The tracks are played in the order you have programed.

To stop during play, press ■.

To exit from Program play mode, press PROGRAM/RANDOM repeatedly again before or after play so that the unit enters another play mode. (The program you have made is stored in memory until you turn off the unit or erase the program.)

To check the program contents

Before playing, you can check the program contents by pressing ◄◄ / |◄◄ or ►►| / ►► on the remote control.

- ►►| / ►►: Shows the programed tracks in the programed order.
- ◄◄ / |◄◄: Shows them in the reverse order.

To modify the program

Before playing, you can erase the programed tracks shown on the display by pressing CANCEL.

- Each time you press the button, the programed track shown on the display is erased from the program.

To add tracks in the program before play, simply select the track numbers you want to add by following step 4 of the programming procedure on page 16.

To erase the entire program before or after play, press ■. "PROGRAM" appears on the display.
- Ejecting a CD will also erase the track numbers programed from the ejected CD.

If you try to program a 33rd track
"FULL" will appear on the display.

If your entry is ignored
You have tried to program a track from an empty tray, or a track number that does not exist on the CD (for example, selecting track 14 on a CD that only has 12 tracks). Such entries are ignored.

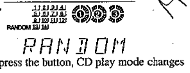
Playing at Random — Random Play

The tracks of all loaded CDs will play at random.
- To use Repeat play for Random play, press REPEAT after starting Random play.

1 Load CDs.
- If the current playing source is not the CD player, press CD ►/II, then ■ before going to the next step.

2 Press PROGRAM/RANDOM repeatedly until "RANDOM" appears on the display.

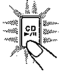
PROGRAM /RANDOM



- Each time you press the button, CD play mode changes as follows:

→ Program Play → Random Play → Continuous Play →

3 Press CD ►/II.
The tracks are played at random.
Random play ends when all the tracks are played once.



To skip the currently playing track, press ►►| (or ►►| / ►► on the remote control).

To stop during play, press ■.
- Random play also stops when one of the disc trays is opened.

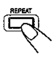
To exit from Random play mode, press PROGRAM/RANDOM repeatedly again before or after play so that the unit enters another play mode.

Even if you press |◄◄ (or ◄◄ / |◄◄ on the remote control)
You cannot go back to the previous tracks during Random play.

Repeating Tracks or CDs — Repeat Play

You can have all the CDs, the program or the individual track currently playing repeat as many times as you like.

To repeat play, press REPEAT during or before playing. To use Repeat play for Program play and Random play, press the button after starting playback.



- Each time you press the button, Repeat play mode changes as follows, and the following indicator lights up on the display:

→ REPEAT ALL → REPEAT 1CD → REPEAT 1 → Canceled (Continuous play) →

REPEAT ALL: Repeats all the tracks on all the CDs (continuously or at random), or all the tracks in the program.
REPEAT 1CD*: Repeats all the tracks on one CD.
REPEAT 1: Repeats one track on one CD.

* REPEAT 1CD is not used for Program play and Random play.

To cancel Repeat play, press REPEAT repeatedly until the REPEAT indicator (REPEAT ALL, REPEAT 1CD, or REPEAT 1) goes off from the display.
- Repeat play is also canceled when you select Program play or Random play.

Prohibiting Disc Ejection — Tray Lock

You can prohibit CD ejection from the unit and can lock CDs.
- This operation is possible only using the buttons on the unit.

To prohibit disc ejection, press ≜ for any disc tray while holding ■. (If there is any disc tray opened, close it first.)
"LOCKED" appears for a while, and the loaded CDs are locked.

To cancel the prohibition and unlock the CDs, press ≜ for any disc tray while holding ■.
"UNLOCKED" appears for a while, and the loaded CDs are unlocked.

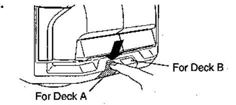
If you try to eject CDs
"LOCKED" appears to inform you that the Tray Lock is in use.

Playing Back Tapes

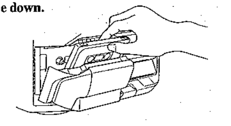
You can play back type I, type II, and type IV tapes without changing any settings.

Playing Back a Tape

1 Press EJECT (≜) for the deck you want to use.



2 Put a cassette in, with the exposed part of the tape down.



3 Close the cassette holder gently.
If you put cassettes in both decks A and B, the last deck you have put a cassette into is selected.
To operate the other deck, press TAPE A/B.

4 Press TAPE ◄ ►.
The tape play starts and the tape direction indicator (◄ ►) starts flashing slowly to indicate the tape running direction.
- Each time you press the button, the tape direction changes.
  - ► : plays the front side.
  - ◄ : plays the reverse side.

When the tape plays to the end, the deck automatically stops if the Reverse Mode is not on. (See "To play both sides repeatedly — Reverse Mode.")

To stop during play, press ■.

To operate the other deck, press TAPE A/B, then TAPE ◄ ►.

To fast wind to the left or to the right, press ◄◄ / ►► (◄◄ / |◄◄ or ►►| / ►► on the remote control) while the tape is not running.
The tape direction indicator (◄ ►) starts flashing quickly on the display.

To remove the cassette, press ≜ EJECT for deck A or EJECT ≜ for deck B.

To play both sides repeatedly — Reverse Mode

Reverse Mode works for both decks at the same time.
When it is in use, the tape automatically reverses at the end of a side and the unit starts playing the other side of the tape, and repeats the same process.

To use Reverse Mode, press REVERSE MODE so that the Reverse Mode indicator on the display lights up like — (⇅)

REVERSE MODE

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator on the display lights up like — ⇄

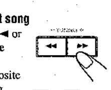
When Reverse Mode is on with cassettes in both decks A and B
After the reverse (◄) side of the tape finishes playing, the tape in the other deck starts playing.

Locating the Beginning of a Song — Music Scan

You can use Music Scan to locate the beginning of a song. Music Scan searches for blank portions that usually separate recorded songs, then plays the next song.

To find the beginning of the current song

During play, press ◄◄ / ►► (◄◄ / |◄◄ or ►►| / ►► on the remote control) in the **opposite direction** to the tape play.
The tape direction indicator of the opposite direction to the tape play starts flashing slowly.



Searching stops automatically at the beginning of the current song, and the current song starts automatically.

To find the beginning of the next song

During play, press ◄◄ / ►► (◄◄ / |◄◄ or ►►| / ►► on the remote control) in **the same direction** as the tape play.
The tape direction indicator of the same direction as the tape play starts flashing slowly and quickly alternately.

Searching stops automatically at the beginning of the next song, and the next song starts automatically.

Music Scan works by detecting a 4-second long blank between each song, so it will not work well in the following cases
- No blank at the beginning of a song.
- Noise (often caused by much use or poor quality dubbing) which fills the blank.
- Long, very soft passages or pauses in a song.

> STOP The use of the C-120 or thinner tape is not recommended, since characteristic deterioration may occur and this tape easily jams in the pinch-rollers and the capstans.

Recording

IMPORTANT:

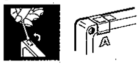
- **It may be unlawful to record or play back copyrighted material without the consent of the copyright owner.**
- The recording level is automatically set correctly, so it is not affected by the VOLUME control and the SUBWOOFER VOLUME control. Thus, during recording you can adjust the sound you are actually listening to without affecting the recording level.
- While recording, you can hear sound modes through the speakers or headphones. However, the sound is recorded without these effects (see page 10).
- If recordings you have made have excessive noise or static, the unit may be too close to a TV. Increase the distance between the TV and the unit.
- You can use type I and II tapes for recording.

To protect your recording

Cassettes have two small tabs on the back to protect unexpected erasure or re-recording.

To protect your recording, remove these tabs.

To re-record on a protected tape, cover the holes with adhesive tape.



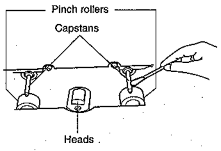
When using type II tape, be careful not to cover the holes used to detect the tape type.

To keep the best recording and playback sound quality

If the heads, capstans, and pinch rollers of the cassette decks become dirty, the following will occur:

- Impaired sound quality
- Discontinuous sound
- Fading
- Incomplete erasure
- Difficulty in recording

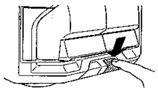
To clean the heads, capstans, and pinch rollers
Use a cotton swab moistened with alcohol.



To demagnetize the heads
Turn off the unit, and use a head demagnetizer (available at electronics and record shops).

Recording a Tape on Deck B

1 Press EJECT ▲ for the deck B.



2 Put in a recordable cassette, with the exposed part of the tape down.

3 Close the cassette holder gently.

4 Check the tape direction of deck B.

- If the tape direction is not correct, press TAPE ◄ ► twice then ■ to change the tape direction.

5 Start playing the source — FM, AM (LW/MW)*, CD player, deck A, or auxiliary equipment connected to AUX jacks.

- When the source is CD, you can also use CD Direct Recording (see page 20) and Auto Edit Recording (see page 21).
- When the source is deck A, you can also use the dubbing method. (See "Dubbing Tapes" on page 20.)

* See "To record an AM (LW/MW) station — Beat Cut" on page 20.

6 Start recording.
On the unit:
Press REC START/STOP.
On the remote control:
Press and hold REC START/STOP for more than 1 second.
The REC (recording) indicator lights up on the display and recording starts.

To stop during recording, press REC START/STOP again or ■.

To remove the cassette, press EJECT ▲ for deck B.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as — (⇄)

- When using the Reverse Mode for recording, start recording in the forward (►) direction first.
  Otherwise, recording will stop when recording is done only on one side (reverse) of the tape.

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as — ⇄

To record an AM (LW/MW) station — Beat Cut

While recording an AM (LW/MW) broadcast, beats may be heard (which are never heard when listening to the broadcast without recording it).

If this occurs, press PROGRAM/RANDOM repeatedly, while recording, until the beats are reduced.

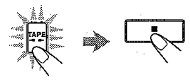
- Each time you press the button, the display changes to show the following:

→ CUT1 → CUT2 → CUT3 → CUT4 ┐

Dubbing Tapes

It is preferable that the tape type (type I or II) you record from be the same as the tape type you record onto when dubbing tapes.

1 Press TAPE ◄ ►, then ■.



2 Put the source cassette in deck A, and a recordable cassette into deck B.

- Put the cassettes in both decks so that the tapes will run in the forward (►) direction.

3 Press DUBBING.
Dubbing starts.

To stop during dubbing, press ■.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as — (⇄)

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as — ⇄

Continued

CD Direct Recording

Everything on the CD goes onto the tape in the order it is on the CD, or according to the order you have made for Program play.

1 Put a recordable cassette into deck B.

2 Place a disc correctly on the circle of the disc tray, with its label side up.

3 Press one of the disc number buttons (CD1 to CD3) to select the disc, then ■.

4 Press CD REC START.
"CD REC" appears, and the REC (recording) indicator lights up on the display.
Deck B starts recording and the CD player starts playing.
When the recording is done, "CD REC FINISHED" appears on the display, and the CD player and deck B stop.

To stop during CD Direct Recording, press ■ or REC START/STOP.

To record on both sides — Reverse Mode

Press REVERSE MODE so that the Reverse Mode indicator lights up as — (⇄)

- When using the Reverse Mode for CD Direct Recording, start recording in the forward (►) direction first. When the tape reaches its end while recording a song in the forward direction (►), the last song will be recorded at the beginning of the reverse side (◄).

  If you start recording on the reverse side (◄), recording will stop when recording is done only on one side (reverse) of the tape.

To cancel Reverse Mode, press the button again so that the Reverse Mode indicator lights up as — ⇄

Auto Edit Recording

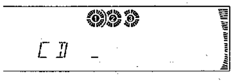
By using Auto Edit Recording, you can record the CD tracks to fit the tape. Auto Edit Recording makes a program by selecting the CD tracks in numerical order. However, to prevent the end of the last track on the front side from being cut off, the last track is selected so as to fit on the remaining tape length.

On the unit ONLY:

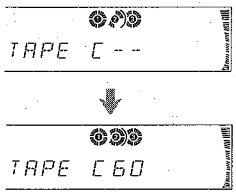
1 Load CDs.

- If the current playing source is not the CD player, press CD ►/II, then ■ before going to the next step.

2 Press EDIT.



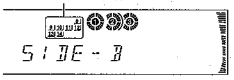
3 Press the disc number button (CD1 to CD3) for the disc you want to record from.



The optimum tape length for the disc appears.

To change the tape length manually
If the tape length selected is not satisfactory, you can change the tape length by pressing ⏮ or ⏭.
You can select the tape length among the following — 40, 46, 50, 54, 60, 64, 70, 74, 80, 84, and 90.

4 Press SET.


Tracks to be recorded on the reverse side (SIDE-B) appear.
SIDE - B

- Each time you press the button, the tracks to be recorded on the front side (SIDE-A) and on the reverse side (SIDE-B) alternate.

5 Put a recordable cassette of appropriate length into deck B.

6 Press REVERSE MODE so that the Reverse Mode indicator lights up as (⇄).

- Without turning on the Reverse Mode (⇄), recording will stop when the front side of the tape is recorded.

7 Press CD REC START.
The REC (recording) indicator lights up on the display.
Deck B starts recording then, about 10 seconds later, the CD player starts playing.
When the recording is done, "CD REC FINISHED" appears on the display, and the CD player and deck B stop.

- If a tape has not been rewound, deck B will rewind the tape before it starts recording.
- A 10-second blank portion is automatically created at the beginning of each side of the tape.

To stop during Auto Edit Recording
Press ■ or REC START/STOP so that a 4-second blank portion is created on the recorded tape. (Remember a 4-second blank is important when using Music Scan — see page 18.)

To cancel Auto Edit Recording
Press CANCEL before or after play.

- Pressing one of the following buttons will also cancel Auto Edit Recording — ■, REC START/STOP, and PROGRAM/RANDOM.

Using the Timers

There are three timers available — Recording Timer, Daily Timer, and Sleep Timer.

Before using the timers, you need to set the clock built in the unit. (See page 9.)

Using Daily Timer

With Daily Timer, you can wake to your favorite music or radio program.

How Daily Timer actually works

The unit automatically turns on, set the volume level to the preset level, and starts playing the specified source when the on-time comes (the ⏲ indicator flashes just before the on-time, and continues flashing while the timer is operating). Then, when the off-time comes ("OFF" flashes just before the off-time), the unit automatically turns off (stands by).
The timer setting remains in memory until you change it.

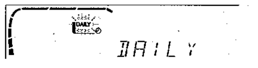
- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- If you have made a mistake while setting timer, press CANCEL. (However, this does not always work. If CANCEL does not work, press CLOCK/TIMER repeatedly and start from step 1 again.)

Before you start...

- *When using a CD as the source to play,* make sure there is a CD on the selected disc number tray.
- *When using a tape as the source to play —*
  - Make sure that a tape is in the deck whose deck indicator (A or B) is lit on the display.
  - Make sure that the tape direction is correct.
- *When using the external component as the source to play,* set the timer equipped with the external component at the same time.

On the unit ONLY:

1 Press CLOCK/TIMER until "DAILY" appears on the display.
The DAILY (Daily Timer) indicator also starts flashing on the display.

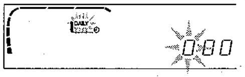


- Each time you press the button, the timer setting modes change as follows:

→ DAILY → ON TIME → REC ┐
└ Canceled ← Clock setting (See page 9.) ← ON TIME ←

Continued

2 Press CLOCK/TIMER again.
"ON TIME" appears for 2 seconds, then the unit enters on-time setting mode.

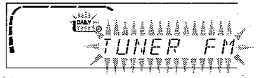


3 Set the on-time you want the unit to turn on.

1) Press ⏮ or ⏭ to set the hour, then press SET.
2) Press ⏮ or ⏭ to set the minute, then press SET.
   "OFF TIME" appears for 2 seconds, then the unit enters off-time setting mode.

4 Set the off-time you want the unit to turn off (on standby).

1) Press ⏮ or ⏭ to set the hour, then press SET.
2) Press ⏮ or ⏭ to set the minute, then press SET.
   The unit enters source selecting mode.



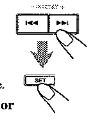
5 Press ⏮ or ⏭ to select the source to play, then press SET.

- Each time you press ⏮ or ⏭, the source changes as follows:

→ TUNER FM → TUNER AM ┐
└ AUX ← TAPE ← – CD – – ←

TUNER FM: tunes into a specified preset FM station. → go to step 6.
TUNER AM: tunes into a specified preset AM (LW/MW) station. → go to step 6.
– CD – –: plays a disc from a specified track of a specified disc. → go to step 6.
TAPE: plays a tape in deck A or B. → go to step 7.
AUX: plays an external source. → go to step 7.

6 When selecting "– CD – –"

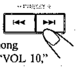


1) Press ⏮ or ⏭ to select the disc number, then press SET.
2) Press ⏮ or ⏭ to set the track number, then press SET.
   The unit enters volume setting mode.

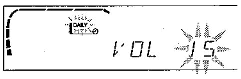
When selecting "TUNER FM" or "TUNER AM"

Press ⏮ or ⏭ to select the preset station number, then press SET.
The unit enters volume setting mode.

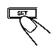
7 Press ⏮ or ⏭ to set the volume level.



- You can select the volume level from among the following — "VOL – –," "VOL 5," "VOL 10," and "VOL 15."
  If you select " VOL – –," the volume is set to the last level when the unit has been turned off.

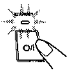


8 Press SET to complete the Daily Timer setting.



The DAILY (Daily Timer) indicator stops flashing and remains lit. The settings you have done are shown on the display in sequence.

9 Press ⏻/I to turn off the unit (on standby) if you have set the Daily Timer with the unit turned on.

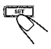


To turn on or off Daily Timer after its setting is done

CLOCK /TIMER

1 **Press CLOCK/TIMER repeatedly until "DAILY" appears on the display.**

2 **To turn off the Daily Timer, press CANCEL.**
The DAILY (Daily Timer) indicator goes off from the display ("OFF" appears for a while).
The Daily Timer is canceled, but the setting for the Daily Timer remains in memory.



To turn on the Daily Timer, press SET.
The DAILY (Daily Timer) indicator lights up on the display. The settings you have done are shown on the display in sequence for your confirmation.

notes **If the unit is turned on when the timer-on time comes**
Daily Timer does not work.

Using Recording Timer

With Recording Timer, you can make a tape of a radio broadcast automatically.

How Recording Timer actually works

The unit automatically turns on, tunes into the specified station, sets the volume level to "MIN," and starts recording when the on-time comes (the ⊙ indicator flashes just before the on-time, and continues flashing while the timer is operating). Then, when the off-time comes ("OFF" appears just before the off-time), the unit automatically turns off (stands by).

The timer setting remains in memory until you change it.

- There is a time limit in doing the following steps. If the setting is canceled before you finish, start from step 1 again.
- If you have made a mistake while setting the timer, press CANCEL. (However, this does not always work. If CANCEL does not work, press CLOCK/TIMER repeatedly and start from step 1 again.)

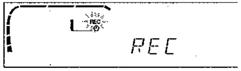
On the unit ONLY:

1 Put a recordable cassette into deck B.

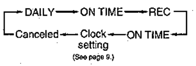
2 Press CLOCK/TIMER until "REC" appears on the display.

CLOCK /TIMER

The REC (Recording Timer) indicator also starts flashing on the display.



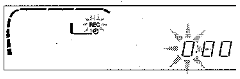
- Each time you press the button, the timer setting modes change as follows:



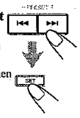
3 Press CLOCK/TIMER again.

CLOCK /TIMER

"ON TIME" appears for 2 seconds, then the unit enters on-time setting mode.

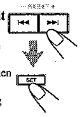


4 Set the on-time you want the unit to turn on.



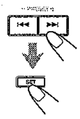
1) Press ⏮ or ⏭ to set the hour, then press SET.
2) Press ⏮ or ⏭ to set the minute, then press SET.
   "OFF TIME" appears for 2 seconds, then the unit enters off-time setting mode.

5 Set the off-time you want the unit to turn off (on standby).



1) Press ⏮ or ⏭ to set the hour, then press SET.
2) Press ⏮ or ⏭ to set the minute, then press SET.
   The unit enters preset station selecting mode.

6 Select the preset station.



1) Press ⏮ or ⏭ to select the band ("TUNER FM" or "TUNER AM"), then press SET.
2) Press ⏮ or ⏭ to select a preset channel number, then press SET.
   The REC (Recording Timer) indicator stops flashing and remains lit. The settings you have done are shown on the display in sequence.

7 Press ⏻/I to turn off the unit (on standby) if necessary.

notes **If you want to listen to another source while recording**
Press REC START/STOP to stop recording. Without stopping it, you cannot change the source.

To turn on or off Recording Timer after its setting is done

CLOCK /TIMER

1 **Press CLOCK/TIMER repeatedly until "REC" appears on the display.**

2 **To turn off the Recording Timer, press CANCEL.**
The REC (Recording Timer) indicator goes off from the display.
The Recording Timer is canceled, but the setting for the Recording Timer remains in memory.

To turn on the Recording Timer, press SET.
The REC (Recording Timer) indicator lights up on the display. The settings you have done are shown on the display in sequence for your confirmation.

Using Sleep Timer

With Sleep Timer, you can fall asleep to music.
You can set Sleep Timer when the unit is turned on.

How Sleep Timer actually works

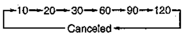
The unit automatically turns off after the specified time length passes.

On the remote control ONLY:

1 Press SLEEP.

The time length until the shut-off time appears and the SLEEP indicator starts flashing on the display.

- Each time you press the button, the time length changes as follows:



2 Wait for about 5 seconds after specifying the time length.

The SLEEP indicator stops flashing and remains lit.

To check the remaining time until the shut-off time, press SLEEP once so that the remaining time until the shut-off time appears for about 5 seconds.

To change the shut-off time, press SLEEP repeatedly until the desired time length appears on the display.

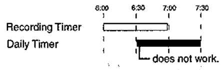
To cancel the setting, press SLEEP repeatedly so that the SLEEP indicator goes off.

- Sleep Timer is also canceled when you turn off the unit.

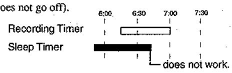
Timer Priority

Since each timer can be set separately, you may wonder what happens if the setting for these timers overlaps.
Here are examples.

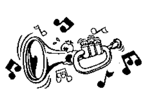
- **Recording Timer has priority over Daily Timer and Sleep Timer.**
  If Daily Timer is set to come on while Recording Timer is operating, Daily Timer will not come on at all.



If Recording Timer is set to come on while Sleep Timer is operating, Sleep Timer will not work (the SLEEP indicator does not go off).

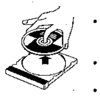


Maintenance

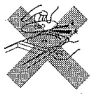


To get the best performance of the unit, keep your discs, tapes, and mechanism clean.

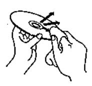
Handling discs



- Remove the disc from its case by holding it at the edge while pressing the center hole lightly.
- Do not touch the shiny surface of the disc, or bend the disc.
- Put the disc back in its case after use to prevent warping.



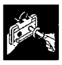
- Be careful not to scratch the surface of the disc when placing it back in its case.
- Avoid exposure to direct sunlight, temperature extremes, and moisture.



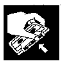
To clean the disc
Wipe the disc with a soft cloth in a straight line from center to edge.

DO NOT use any solvent — such as conventional record cleaner, spray, thinner, or benzine — to clean the disc.

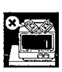
Handling cassette tapes



- If the tape is loose in its cassette, take up the slack by inserting a pencil in one of the reels and rotating.
- If the tape is loose, it may get stretched, cut, or caught in the cassette.

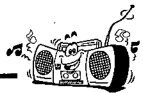


- Be careful not to touch the tape surface.



- Avoid the following places to store the tape:
  — In dusty places
  — In direct sunlight or heat
  — In moist areas
  — Near a magnet

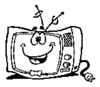
Troubleshooting



If you are having a problem with your unit, check this list for a possible solution before calling for service.
If you cannot solve the problem from the hints given here, or the unit has been physically damaged, call a qualified person, such as your dealer, for service.

Symptom	Cause	Action
No sound is heard.	Connections are incorrect or loose.	Check all connections and make corrections. (See pages 6 to 8.)
Hard to listen to broadcasts because of noise.	• Antennas are disconnected. • The AM (LW/MW) loop antenna is too close to the unit. • The FM antenna is not properly extended and positioned.	• Reconnect the antennas correctly and securely. • Change the position and direction of the AM (LW/MW) loop antenna. • Extend the FM antenna at the best position.
The disc sound is discontinuous.	The disc is scratched or dirty.	Clean or replace the disc. (See page 25.)
The disc tray does not open or close.	• The AC power cord is not plugged in. • Trays are locked.	• Plug the AC power cord. • Unlock the trays. (See page 17.)
The disc does not play.	The disc is placed upside down.	Place the disc with the label side up.
The cassette holders cannot be opened.	Power supply from the AC power cord has been cut off while the tape was running.	Turn on the unit.
Impossible to record.	Small tabs on the back of the cassette are removed.	Cover the holes with adhesive tape.
Operations are disabled.	The built-in microprocessor may malfunction due to external electrical interference.	Unplug the AC power cord and then plug it back in.
Unable to operate the unit from the remote control.	• The path between the remote control and the remote sensor on the unit is blocked. • The batteries are exhausted.	• Remove the obstruction. • Replace the batteries.

Additional Information



Description of the PTY codes:

NEWS:	News.
AFFAIRS:	Topical program expanding or enlarging upon the news — debate, or analysis.
INFO:	Program the purpose of which is to impart advice in the widest sense.
SPORT:	Program concerned with any aspect of sports.
EDUCATE:	Educational programs.
DRAMA:	All radio plays and serials.
CULTURE:	Programs concerning any aspect of national or regional culture, including language, theatre, etc.
SCIENCE:	Programs about natural sciences and technology.
VARIED:	Used for mainly speech-based programs like quizzes, panel games and personality interviews.
POP M:	Commercial music of current popular appeal.
ROCK M:	Rock music.
M.O.R. M:	Current contemporary music considered to be "easy-listening."
LIGHT M:	Instrumental music, and vocal or choral works.
CLASSICS:	Performances of major orchestral works, symphonies, chamber music, etc.
OTHER M:	Music not fitting into any of the other categories.
WEATHER:	Weather reports and forecasts.
FINANCE:	Stock Market reports, commerce, trading etc.
CHILDREN:	Programs targeted at a young audience.
SOCIAL A:	Programs about sociology, history, geography, psychology and society.
RELIGION:	Religious programs.
PHONE IN:	Involving members of the public expressing their views either by phone or at a public forum.
TRAVEL:	Travel information.
LEISURE:	Programs about recreational activities.
JAZZ:	Jazz music.
COUNTRY:	Songs which originate from, or continue the musical tradition of the American Southern States.
NATIONAL:	Current popular music of the nation or region in that country's language.
OLDIES:	Music from the so-called "golden age" of popular music.
FOLK M:	Music which has its roots in the musical culture of a particular nation.
DOCUMENT:	Program concerning factual matters, presented in an investigative style.
TRAFFIC:	Traffic announcement.

Classification of the PTY codes for some FM stations may be different from the above list.

Specifications

Amplifier section

Output Power (IEC 268-3/DIN)
SUBWOOFERS: 84 W per channel, min. RMS, both channels driven into 6 Ω at 63 Hz with no more than 0.9% total harmonic distortion.
MAIN SPEAKERS: 20 W per channel, min. RMS, both channels driven into 6 Ω at 1 kHz with no more than 0.9% total harmonic distortion.

Audio input sensitivity/Impedance
(at 1 kHz, measured at MAIN SPEAKERS)
AUX: 340 mV/50 kΩ

Audio output level
AUX: 260 mV

Digital output: CD OPTICAL DIGITAL OUTPUT
Signal wave length: 660 nm
Output level: –15 dBm to –12 dBm

Speakers/Impedance: 6 Ω – 16 Ω

Tuner

FM tuning range: 87.50 MHz – 108.00 MHz
AM tuning range: MW: 522 kHz – 1,629 kHz
LW: 144 kHz – 288 kHz

CD player

CD Capacity: 3 CDs
Dynamic range: 85 dB
Signal-to-noise ratio: 90 dB
Wow and flutter: Immeasurable

Cassette deck

Frequency response
Normal (type I): 50 Hz — 14,000 Hz
CrO_2 (type II): 50 Hz — 14,000 Hz
Metal (type IV): 50 Hz — 14,000 Hz (only for playback)
Wow and flutter
0.15% (WRMS)

General

Power requirement: AC 230 V∿, 50 Hz
Power consumption: 145 W (at operation)
17 W (on standby)
Dimensions (approx.): 265 mm x 335 mm x 368 mm (W/H/D)
(10 $^{7}/_{16}$ in. x 13 $^{1}/_{4}$ in. x 14 $^{1}/_{2}$ in.)
Mass (approx.): 10.3 kg (22.5 lbs)

Supplied accessories

See page 6.

Design and specifications are subject to change without notice.

Instructions(SP-MXJ950R)

JVC INSTRUCTIONS

SPEAKER SYSTEM

SP-MXJ950R

BEDIENUNGSANLEITUNG: LAUTSPRECHERSYSTEM
MANUEL D'INSTRUCTIONS: SYSTEME DES ENCEINTES
GEBRUIKSAANWIJZING: LUIDSPREKERSYSTEEM
MANUAL DE INSTRUCCIONES: SISTEMA DE ALTAVOCES
ISTRUZIONI: SISTEMA DI ALTOPARLANTI
BRUKSANVISNING: HÖGTALARSYSTEM
VEJLEDNING: HØJTTALERSYSTEM
KÄYTTÖOHJE: KAIUTINJÄRJESTELMÄ

Thank you for purchasing JVC speakers.

Before you begin using them, please read the instructions carefully to be sure you get the best possible performance. If you have any questions, consult your JVC dealer.

Vielen Dank für den Kauf dieser JVC-Lautsprecher.

Lesen Sie bitte diese Bedienungsanleitung vor Ingebrauchnahme sorgfältig durch, um stets optimale Ergebnisse zu erzielen. Wenden Sie sich bei etwaigen Fragen bitte an Ihren JVC Händler.

Nous vous remercions pour l'achat de ces enceintes JVC.

Avant de les utiliser, lire ces instructions avec attention pour en obtenir les meilleures performances possibles. En cas de questions, consulter votre revendeur JVC.

Dank u voor de aanschaf van deze luidsprekers.

Lees alvorens over te gaan tot aansluiten, deze gebruiksaanwijzing door zodat u de best mogelijke prestaties zult verkrijgen. Neem kontakt op met de JVC dealer indien u vragen heeft.

Le estamos muy agradecidos por haber adquirido estos altavoces de JVC.

Antes de utilizarlos, sirvase leer las instrucciones detenidamente a fin de obtener el mejor rendimiento posible. Si tienenaluna pregunta, acuda a su agente de JVC.

Grazie per aver acquistato questi altoparlanti della JVC.

Prima di cominciare l'uso degli altoparlanti, leggete attentamente le istruzioni per assicurare le migliori prestazioni. Qualora sorgessero dei dubbi, rivolgetevi al vostro rivenditore JVC.

Tack för ditt val av dessa JVC-högtalare.

Innan du kopplar in högtalarna i din ljudanläggning bör du för att få maximala prestanda från högtalarna läsa igenom bruksanvisningen noggrant. Kontakta din JVC-återförsäljare om du har frågor eller känner dig osäker.

Tak for købet af JVC-højttaleme.

Gennemlæs venligst vejledningen omhyggeligt før de tages i brug, så De kan opnå den bedst mulige ydelse. Forhør hos Deres JVC forhandler hvis De har nogen spørgsmål.

Kiitos siitä ettë päädyit valinnassasi JVC-kaiuttimiin.

Ennen kuin alat käyttää niitä, lue käyttöohje huolellisesti, jotta ne toimisivat parhaalla mahdollisella tavalla. Jos Sinulla on kysyttävää ota yhteys JVC-edustajaan.

— SAFETY INSTRUCTIONS —
"SOME DOS AND DON'TS ON THE SAFE USE OF EQUIPMENT"

This equipment has been designed and manufactured to meet international safety standards but, like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Do read the operating instructions before you attempt to use the equipment.

Do ensure that all electrical connections (including the mains plug, extension leads and interconnections between pieces of equipment) are properly made and in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt about the installation, operation or safety of your equipment.

Do be careful with glass panels or doors on equipment.

DON'T continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way — switch off, withdraw the mains plug and consult your dealer.

DON'T remove any fixed cover as this may expose dangerous voltages.

DON'T leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode.

Switch off using the switch on the equipment and make sure that your family know how to do this.

Special arrangements may need to be made for infirm of handicapped people.

DON'T use equipment such as personal stereos or radios so that you are distracted from the requirements of traffic safety. It is illegal to watch television whilst driving.

DON'T listen to headphones at high volume as such use can permanently damage your hearing.

DON'T obstruct the ventilation of the equipment, for example with curtains or soft furnishing.

Overheating will cause damage and shorten the life of the equipment.

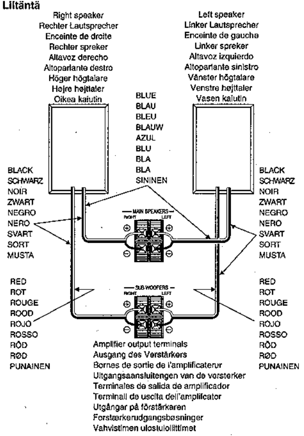
DON'T use makeshift stands and NEVER fix legs with wood screws — to ensure complete safety always fit the manufacturer's approved stand or legs with the fixings provided according to the instructions.

DON'T allow electrical equipment to be exposed to rain or moisture.

ABOVE ALL

- NEVER let anyone, especially children, push anything into holes, slots or any other opening in the case.
- this could result in a fatal electrical shock;
- NEVER guess or take chances with electrical equipment of any kind
- it is better to be safe than sorry!

Connection
Anschluß
Raccordement
Aansluiting
Conexión
Collegamento
Ansluiting
Tilslutning
Liitäntä



CONNECTION

- Turn off power to the whole system before connecting the speakers to the amplifier.
- The maximum power handling capacity of the SP-MXJ950R main speaker is 50 W/sub woofer is 150 W. Excessive input will result in abnormal noise and possible damage. In cases where the signals described below are applied to the speakers, even if the signals are below the maximum allowable input, they may cause an overload and burn the wiring of the speakers. Be sure to lower the amplifier volume beforehand.
  1) Noise during FM tuning.
  2) High level signals containing high frequency components produced by a tape deck in the fast forward mode.
  3) Click noise produced when turning power of other components on and off.
  4) Click noise produced when connecting or disconnecting cords with the power on.
  5) Click noise produced when the cartridge is replaced with the power on.
  6) Click noise produced when operating amplifier switches.
  7) Continuous high frequency oscillation or high pitch electronically produced musical instrument sound.
  8) Howling when using a microphones.

SPECIFICATIONS

Type	4-way 4-speaker Bass-Reflex Type Twin Hyper Power-Drive Subwoofer
Speakers	
Subwoofer	20 cm (7-7/8") cone × 1
Main woofer	20 cm (7-7/8") cone × 1
Mid Range	5 cm (2") cone × 1
Tweeter	2 cm (13/16") dome × 1
Power Handling Capacity	
Subwoofer	150 W
Main Speaker	50 W
Impedance	
Subwoofer	6 Ω
Main Speaker	6 Ω
Frequence Range	
Subwoofer	25 Hz ~ 1 200 Hz
Main Speaker	75 Hz ~ 29 000 Hz
Sound Pressure Level	
Subwoofer	74 dB/W·m
Main Speaker	88 dB/W·m
Dimensions (W × H × D)	330 mm × 335 mm × 407mm (13" × 13-1/4" × 16-1/16")
Mass	8.2 kg (18.1 lbs) each

Design and specifications subject to change without notice.

ANSCHLUSS

- Schalten Sie vor dem Anschluß der Lautsprecher an den Verstärker die Spannungsversorgung des gesamten Systems aus.
- Die maximale Belastbarkeit des SP-MXJ950R-Hauptlautsprechers ist 50 W und die des Subwoofers ist 150 W. Eine Überlastung führt zu Verzerrungen und möglicherweise zu Beschädigungen. Signale der unten beschriebenen Art können, auch wenn sie unter dem maximal zulässigen Eingang liegen, eine Überlastung verursachen und die Lautsprecherwicklungen durchbrennen. Verringern Sie vorher die Lautstärke des Verstärkers.
  1) Geräusche beim Einstellen von UKW-Sendern.
  2) Hochpegelige Signale mit Hochfrequenz-Anteilen, die von Tonbanddecks beim Schnellvorspulen erzeugt werden.
  3) Klickgeräusche, wenn die Spannungsversorgung anderer Komponenten ein-und ausgeschaltet wird.
  4) Klickgeräusche, wenn Kabel angeschlossen oder abgetrennt werden, während die Spannungsversorgung eingeschaltet ist.
  5) Klickgeräusche, wenn der Tonabnehmer des Plattenspielers ausgewechselt wird, während die Spannungsversorgung eingeschaltet ist.
  6) Klickgeräusche, die beim Betätigen von Schaltern des Verstärkers erzeugt werden.
  7) Ständige Hochfrequenzschwingungen oder elektronisch erzeugte Töne von Musikinstrumenten mit hohen Tonhöhen.
  8) Rückkopplungen von Mikrofonen.

RACCORDEMENT

- Mettre hors circuit tout le système avant de raccorder les enceintes à l'amplificateur.
- La puissance maximale admissible par le haut-parleur principal du SP-MXJ950R est de 50 W, celle admissible par le haut-parleur d'extrêmes graves est de 150 W.
  En dépassant la puissance admissible, cela provoquera des bruits anormaux et détériorera les enceintes.
  Au cas où les signaux décrits ci-dessous sont envoyés aux enceintes, et même si ces signaux sont inférieurs à la puissance d'entrée maximum admissible, ils risquent de provoquer une surcharge ou même un incendie. S'assurer de bien diminuer le volume sonore de l'amplificateur.
  1) Parasites durant une syntonisation FM.
  2) Signaux de niveau élevé contenant des composants à haute fréquence, comme ceux générés par une platine d'enregistrement en mode avance rapide.
  3) Cliquetis se produisant lorsque d'autres appareils sont mis en ou hors circuit.
  4) Cliquetis se produisant lorsque des appareils sont branchés ou dé-branchés alors que leur alimentation est en circuit.
  5) Cliquetis se produisant lorsque la cellule d'une platine tourne-disque est changée alors que l'alimentation est en circuit.
  6) Cliquetis se produisant lorsque les commandes de l'amplificateur sont manipulées.
  7) Oscillations continuelles à haute fréquence ou sons très aigus provenant d'instruments de musique électroniques.
  8) Hurlements dus à l'utilisation de micros.

TECHNISCHE DATEN

Typ	4-Weg, 4-Lautsprecher-Baßreflexbox Twin Hyper Power-Drive Subwoofer
Lautsprecher	
Subwoofer	20 cm Konus × 1
Hauptwoofer	20 cm Konus × 1
Mittenbereich	5 cm konus × 1
Hochtöner	2 cm Aufgekelcht × 1
Belastbarkeit:	
Subwoofer	150 W
Hauptlautsprecher	50 W
Impedanz:	
Subwoofer	6 Ω
Hauptlautsprecher	6 Ω
Frequenzbereich:	
Subwoofer	25 Hz bis 1 200 Hz
Hauptlautsprecher	75 Hz bis 29 000 Hz
Schalldruckpegel:	
Subwoofer	74 dB/W·m
Hauptlautsprecher	88 dB/W·m
Abmessungen (B × H × T)	330 mm × 335 mm × 407mm
Gewicht	Je 8,2 kg

Technische Änderungen vorbehalten.

CARACTÉRISTIQUES

Type	Enceinte 4 voices, 4 haut-parleurs type à réflexion des basses Twin Hyper Power-Drive Subwoofer
Haut-parleurs	
Extrêmes graves	conique de 20 cm × 1
Principal	conique de 20 cm × 1
Médium	conique de 5 cm × 1
Aigus	dôme de 2 cm × 1
Puissance maximale admissible	
Haut-parleur d'extrêmes graves	150 W
Haut-parleur principal	50 W
Impédance	
Haut-parleur d'extrêmes graves	6 Ω
Haut-parleur principal	6 Ω
Bande passante	
Haut-parleur d'extrêmes graves	25 Hz–1 200 Hz
Haut-parleur principal	75 Hz–29 000 Hz
Pression sonore	
Haut-parleur d'extrêmes graves	74 dB/W·m
Haut-parleur principal	88 dB/W·m
Dimensions (L × H × P)	330 mm × 335 mm × 407 mm
Masse	8,2 kg chaque

Présentation et caractéristiques modifiables sans préavis.

AANSLUITINGEN

- Schakel de spanning van alle aangesloten komponenten uit alvorens de luidsprekers met de versterker te verbinden.
- Het maximale vermogen van de SP-MXJ950R hoofdluidspreker is 50 W en van de subwoofer 150 W. Te hoge ingang kan in abnormale geluidsreproduktie en in beschadigingen resulteren.
  Overbelasting en verbranding van de bedrading kan worden veroorzaakt, wanneer de hieronder beschreven signalen naar de luidspekers worden gevoed, zelfs wanneer de signalen onder het maximaal toegestane ingangsvermogen zijn. Verminder eerst het volume van de versterker.
  1) Ruis, zoals dit optreedtijdens afstemming op een FM-zender.
  2) Hoogfrekwentie signalen van een hoog niveau, zoals die tijdens het vooruitspoelen van een tapedeck worden geproduceerd.
  3) Klikkende geluiden, die worden veroorzaakt door het in - en uitschakelen van de netspanning van andere komponenten.
  4) Klikkende geluiden, zoals die worden geproduceerd bij het tot stand brengen of verbreken van aansluitingen terwijl de netspanning is ingeschakeld.
  5) Klikkende geluiden, zoals die optreden bij het vervangen van het element van een draaitafel terwijl de netspanning is ingeschakeld.
  6) Klikkende geluiden, zoals die worden geproduceerd door bediening van de schakelaars van de versterker.
  7) Voortdurende hoogfrekwentie-oscillatie, of hoogtonige, elektronisch geproduceerde geluiden van muziekinstrumenten.
  8) Rondzingend geluid bij gebruik van mikrofoons.

CONEXIÓN

- Desactive la alimentación de todo el sistema antes de conectar los altavoces al amplificador.
- La capacidad máxima de potencia del altavoz principal del SP-MXJ950R es de 50 W y la del altavoz de subgraves es de 150 W.
  Uná entrada excesiva resultará en ruido anormal y posibles daños.
  En casos donde las señales descritas más abajo se apliquen a los altavoces, aunque las mismas resulten menores que la entrada máxima permisible, pueden causar una sobrecarga y quemar el cableado de los altavoces. Asegúrese de disminuir el volumen del amplificador con anterioridad.
  1) Ruido durante la sintonia en FM.
  2) Señales de alto nivel que contengan componentes de alta frecuencia producidos por un magnetófono en el modo de avance rápido.
  3) Ruidos de conmutación provocados al encender y apagar otros componentes.
  4) Ruido de conmutación al conectar o desconectar cables con los componentes encendidos.
  5) Ruido de conmutación cuando se reemplaza la cápsula con los componentes encendidos.
  6) Ruido de conmutación provocados por la operación de los selectores del amplificador.
  7) Continua oscilación de alta frecuencia o de sonidos de tonos altos provocados por instrumentos electrónicos.
  8) Aullidos a utilizar micrófonos.

TECHNISCHE GEGEVENS

Type	4-weg 4-luidsprekers 4 bass reflex Twin Hyper Power-Drive Subwoofer
Luidsprekers	
Subwoofer	20 cm kegeltype × 1
Hoofdwoofer	20 cm kegeltype × 1
Midrange	5 cm kegeltype × 1
Tweeter	2 cm kople × 1
Maximale vermogen	
Subwoofer	150 W
Hoofdluidspreker	50 W
Impedantie	
Subwoofer	6 Ω
Hoofdluidspreker	6 Ω
Frekwentiebereik	
Subwoofer	25 Hz–1 200 Hz
Hoofdluidspreker	75 Hz–29 000 Hz
Geluidsdrukniveau	
Subwoofer	74 dB/W·m
Hoofdluidspreker	88 dB/W·m
Afmetingen (B × H × D)	330 mm × 335 mm × 407 mm
Gewicht	Elk 8,2 kg

Veranderingen in technische gegevens et ontwerp onder voorbehpoud.

ESPECIFICACIONES

Tipo	Reflex bajo con 4-altavoces y 4 vías Twin Hyper Power-Drive Subwoofer
Altavoces	
De subgraves	Tipo cónico de 20 cm × 1
Principal	Tipo cónico de 20 cm × 1
De Medios	Tipo cónico de 5 cm × 1
De agudos	Tipo duomo de 2 cm × 1
Capacidad de potencia	
De subgraves	150 W
Principal	50 W
Impedancia	
De subgraves	6 Ω
Principal	6 Ω
Gama de frecuencias	
De subgraves	25 Hz–1 200 Hz
Principal	75 Hz–29 000 Hz
Nivel de presión acústica	
De subgraves	74 dB/W·m
Principal	88 dB/W·m
Dimensiones (An × Al × Prf)	330 mm × 335 mm × 407 mm
Peso	8,2 kg cada uno

El diseño y las especificaciones están sujetos a cambio sin aviso.

COLLEGAMENTO

- Spegnete la corrente dell'intero sistema prima di collegare gli altoparlanti all'amplificatore.
- La capacità di potenza massima dell'altoparlante principale del modello SP-MXJ950R è di 50 W e quella del subwoofer è di 150 W. Un ingresso eccessivo causerà un suono anormale è possibili danni.

  Nel caso in cui i segnali descritti qui sotto vengono applicati agli altoparlanti, possono causare un sovraccarico e bruciare il cablaggio degli altoparlanti, anche se i segnali siano al di sotto dell'ingresso massimo ammesso.

  Assicuratevi di diminuire il livello del volume dell'altoparlante prima di procedere.

1) Generazione di rumore durante la sintonizzazione FM.
2) Segnali di alto livello che contengono dei componenti ad alta frequenza riprodotti da una piastra a cassette nel modo di avanzamento rapido.
3) Si senitrà uno scatto quando accendete o spegnete la corrente degli altri compoenti.
4) Si sentirà uno scatto quando collegate o scollegate i cavi con la corrente accesa.
5) Si sentirà uno scatto quando viene sostituita la cartuccia con la corrente accesa.
6) Si sentirà uno scatto quando vengono usati gli interruttori dell'amplificatore.
7) Oscillazione continua ad alta frequenza o suoni acuti da strumenti musicali elettronici.
8) Ululato quando usate i microfoni.

SPECIFICAZIONI

Tipo	: Reflex basso con 4-altoparlanti e 4 vie Twin Hyper Power-Drive Subwoofer
Altoparlanti	
Subwoofer	: Cono da 20 cm × 1
Woofer principale	: Cono da 20 cm × 1
Midrange	: Cono da 5 cm × 1
Tweeter	: Cupola da 2 cm × 1
Capacità di potenza	
Subwoofer	: 150 W
Altoparlante principale	: 50 W
Impedenza	
Subwoofer	: 6 Ω
Altoparlante principale	: 6 Ω
Gamma di frequenza	
Subwoofer	: 25 Hz–1 200 Hz
Altoparlante principale	: 75 Hz–29 000 Hz
Livello di pressione sonora	
Subwoofer	: 74 dB/W·m
Altoparlante principale	: 88 dB/W·m
Dimensioni (L × A × P)	: 330 mm × 335 mm × 407 mm
Massa	: 8,2 kg ciascuno

Il disegno e le specificazioni sono soggetti a cambiamenti senza preavviso.

ANSLUTNING

- Slå av strömmen i alla apparater i ljudanläggningen innan högtalarna ansluts till förstärkaren.
- Maximal effekthanteringskapacitet för SP-MXJ950R är 50 W för huvudhögtalare/150 W för lågbashîgtalare. Brus uppstår i ljudet och högtalarna kan skadas om de matas med för hög effekt. I situationerna som beskrivs nedan kan högtalarna också överbelastas och kabeltråden inne i hägtalarna brännas sönder, fastän högtalarnas effekt inte har överskridits.

  Sänk därför ljudstyrkan på förhand.

1) Brus under inställning av FM-radiostationer.
2) Starka, högfrekventa signaler från ett kassettdäck under snabbspolning framåt.
3) Ljudbangar som uppstår när andra apparater i anläggningen slås till och från.
4) Skrapljud som uppstår när anslutningskablar ansluts eller kopplas från medan strömmen är på.
5) Skrapljud som uppstår när pickupelementet på en skivspelare byts medan strömmen är på.
6) Ljudbangar som uppstår när du använder förstärkarens omkopplare.
7) Kontinuerliga, högfrekvenssvängningar eller högfrekvent ljud från elektroniska musikinstrument.
8) Akustisk återkoppling (tjutande ljud) vid bruk av mikrofoner.

TEKNISKA DATA

Typ	: 4-vägs, 4-elements basreflexhögtalare Twin Hyper Power-Drive Subwoofer
Högtalarelement	
Lågbaselement	: 20 cm kon × 1
Huvudbaselement	: 20 cm kon × 1
Mellanregisten	: 5 cm kon × 1
Diskantelement	: 2 cm dome × 1
Effekthanteringskapacitet	
Lågbashögtalare	: 150 W
Huvudhögtalare	: 50 W
Impedans	
Lågbashögtalare	: 6 Ω
Huvudhögtalare	: 6 Ω
Frekvensomfång	
Lågbashögtalare	: 25 Hz–1 200 Hz
Huvudhögtalare	: 75 Hz–29 000 Hz
Ljudtrycksnivå	
Lågbashögtalare	: 74 dB/W·m
Huvudhögtalare	: 88 dB/W·m
Yttermått (B × H × D)	: 330 mm × 335 mm × 407 mm
Vikt	: 8,2kg perst.

Rätt till ändringar av utförande och specifikationer förbehålles utan föregående meddelande.

TILSLUTNING

- Sluk for strømmen til hele systemet før højttalerne forbindes til forstærkeren.
- Den maksimale belastningskapacitet for SP-MXJ950R hovedhøjttaleren er 50 W/for subwooferen 150 W.

  For kraftigt indgangssignal vil resultere i unormal stoj og muligvis beskadigelse.

  I tilfælde hvor højttalerne udsættes for signalerne beskrevet nedenfor, kan der forekomme overbelastning og overbrænding af ledningerne i höjttalerne selv om signalstyrken er under den maksimale tilladte værdi. Husk derfor at at sænke højttalerlydstyrken i forvejen.

1) Støj under FM-afstemning.
2) Signaler med høje niveauer der indeholder höjfrekvente komponenter dannet af en båndoptager der er indstillet til hurtig fremspoling.
3) Klikstøj dannet når der tændes eller slukkes for strommen til andre domponenter.
4) Klikstøj der dannes når ledninger tilsluttes eller tages ud af forbindelse mens der er tændt for strømmen.
5) Klikstøj der dannes når pickuppen udskiftes mens der er tændt for strømmen.
6) Klikstøj der dannes når forstærkerens omskiftere betjenes.
7) Fortsat høj frekvenssvingning, eller en højlyd dannet af et elektronisk instrument.
8) Hyletoner når der anvendes en mikrofon.

SPECIFIKATIONER

Type	: 4-vejs basrefleks-højttaler med 4-elementer Twin Hyper Power-Drive Subwoofer
Højttalere	
Subwoofer	: 20 cm membran × 1
Hoved-bashøjttaler	: 20 cm membran × 1
Mellemtonehøjttaler	: 5 cm membran × 1
Diskantenhed	: 2 cm dome × 1
Belastningskapacitet	
Subwoofwer	: 150 W
Hovedhøjttaler	: 50 W
Impedans	
Subwoofwer	: 6 Ω
Hovedhøjttaler	: 6 Ω
Frekvensområde	
Subwoofwer	: 25 Hz–1 200 Hz
Hovedhøjttaler	: 75 Hz–29 000 Hz
Lydtryksniveau	
Subwoofwer	: 74 dB/W·m
Hovedhøjttaler	: 88 dB/W·m
Mål (B × H × D)	: 330 mm × 335 mm × 407 mm
Vægt	: 8,2 kg hver

Design og specifikationer kan blive ændret uden varsel.

LIITÄNTÄ

- Katkaise koko järjestelmän virta ennen kuin suoritat liitännät kaiuttimista vahvistimeen.
- Mallin SP-MXJ950R pääkaiuttimen enimmäisteho on 50 W, apubassokaiuttimen 150 W. Liiallinen antoteho aiheuttaa epänormaalia kohinaa ja jopa vahinkoa.

  Tapauksissa, missä kaiuttimet joutuvat alla kuvattujen signaalien kohteeksi, vaikka signaalit olisivat alle sallitun maksimi antotehon, ne saattavat aiheuttaa ylikuormitusta ja polttaa kaiuttimien johdot.

  Vähennä siis vahvistimen äänenvoimakkuutta jo ennalta.

1) Kohinaa FM-virityksen aikana.
2) Kasettidekistä eteenpäinkelauksen aikana muodostuneet vahvat, korkeataajuuksisia komponentteja sisältävät signaalit.
3) Klik-ääni, joka syntyy silloin kun toisten osien virta kytketään ja katkaistaan.
4) Klik-ääni, joka syntyy silloin kun kytketään tai irrotetaan johtoja virran ollessa päällä.
5) Klik-ääni, joka syntyy silloin kun vaihdetaan hylsy virran ollessa päällä.
6) Klik-ääni, joka syntyy silloin kun käytetään vahvistimen kytkimiä.
7) Jatkuva korkea värähtely tai elektronisesti tuotettu korkea soittimen ääni.
8) Ulinaa mikrofonia käytettäessä.

TEKNISET TIEDOT

Tyyppi	: 4-tie, 4 kaiuttimen bassorefleksi Twin Hyper Power-Drive Subwoofer
Kaiuttimet	
Apubasso	: 20 cm karitomuotoinen × 1
Pääbasso	: 20 cm karitomuotoinen × 1
Keskikaiutin	: 5 cm karitomuotoinen × 1
Diskantti	: 2 cm holvi × 1
Enimmäisteho	
Apubasso	: 150 W
Pääkaiutin	: 50 W
Impedanssi	
Apubasso	: 6 Ω
Pääkaiutin	: 6 Ω
Taajuusala	
Apubasso	: 25 Hz–1 200 Hz
Pääkaiutin	: 75 Hz–29 000 Hz
Äänenpainetaso	
Apubasso	: 74 dB/W·m
Pääkaiutin	: 88 dB/W·m
Mitat (L × K × S)	: 330 mm × 335 mm × 407 mm
Paino	: 8,2 kg/kaiutin

Oikeudet muutoksiin pidätetään.

EN. GE. FR. NL. SP. IT. SW. FI. DA.

JVC
VICTOR COMPANY OF JAPAN, LIMITED

1299JYMPRIJEM

Disassembly method

<Main body>

■ Removing the metal cover

(See Fig.1 to 3)

1. Remove the six screws **A** attaching the metal cover on the back of the body.
2. Remove the two screws **B** attaching the metal cover on both sides of the body.
3. Remove the metal cover from the body by lifting the rear part of the cover.

ATTENTION: Do not break the front panel tab fitted to the metal cover.

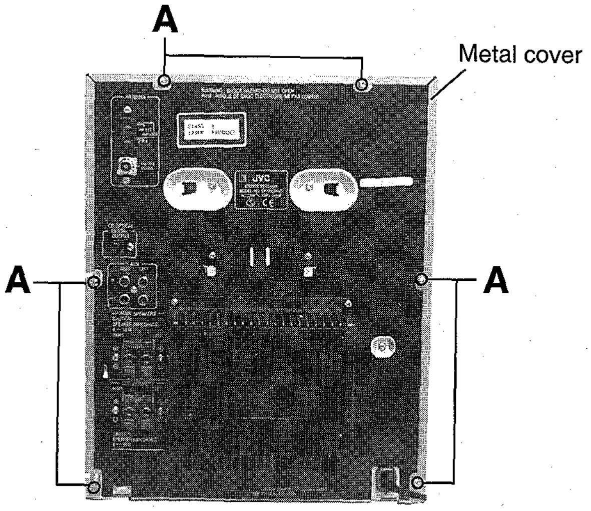

A
Metal cover
A
A

Fig.1

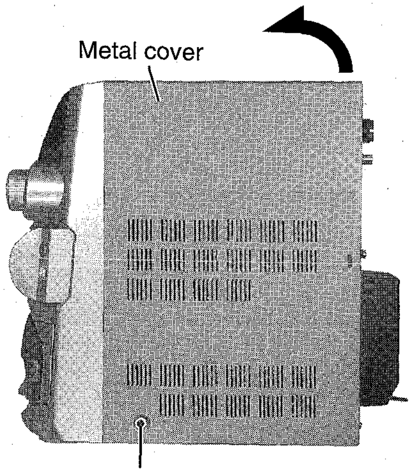

Metal cover
B

Fig.2

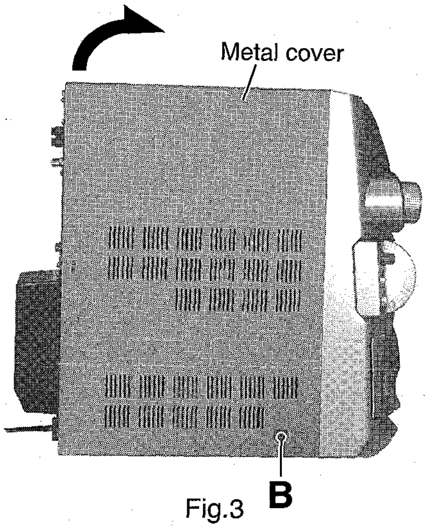

Metal cover
B

Fig.3

■Removing the CD changer mechanism assembly (See Fig.4 to 6)

- Prior to performing the following procedure, remove the metal cover.

1. For the card wire connecting the CD changer mechanism board and the main board, disconnect it from connector CN868 on the main board.

2. Remove the two screws **C** attaching the CD changer mechanism assembly on both sides of the body.

3. Remove the two screws **D** attaching the CD changer mechanism assembly to the rear panel. Remove the screw **E** attaching the AUX terminal, two screws **F** attaching MAIN speaker terminal and two screws **F'** attaching the SUB woofer terminal on the back of the body.

4. Remove the screws **E'** attaching the digital output terminal on the back of the body.

5. Pull the top of rear panel and the front panel assembly outward respectively, then remove the CD changer mechanism assembly by lifting the rear part of the assembly.

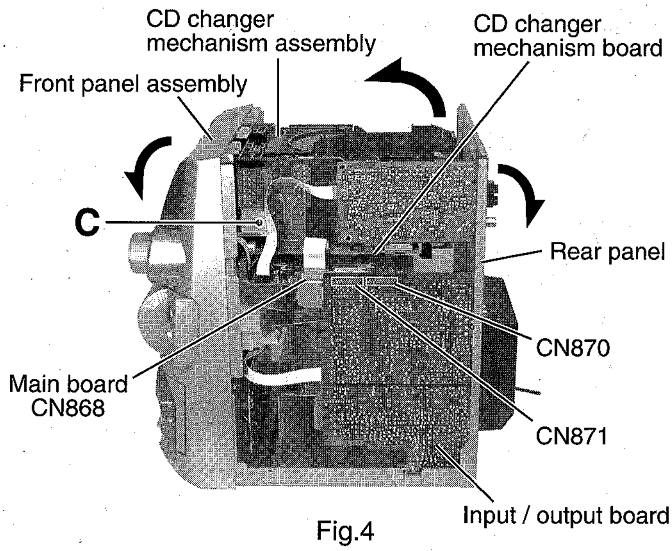

CD changer mechanism assembly
CD changer mechanism board
Front panel assembly
C
Rear panel
CN870
Main board CN868
CN871
Input / output board

Fig.4

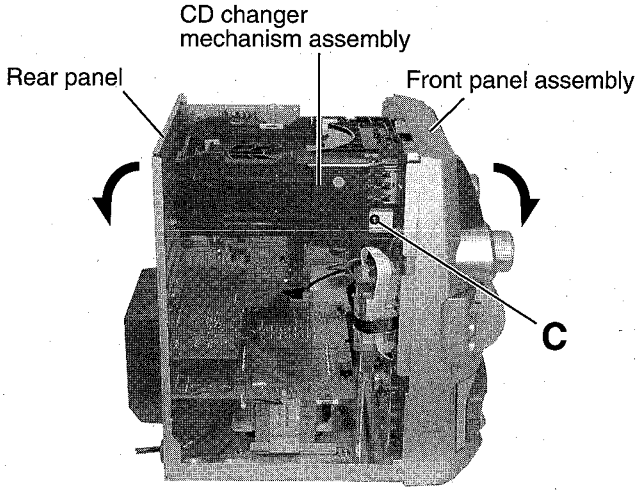

CD changer mechanism assembly
Rear panel
Front panel assembly
C

Fig.5

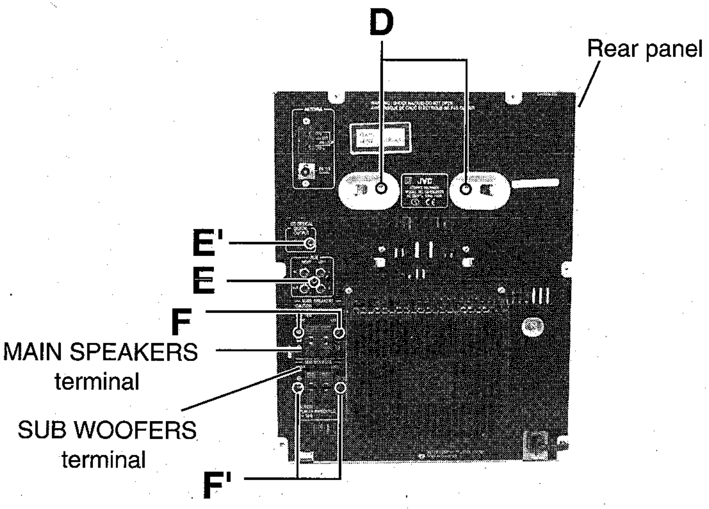

D
Rear panel
E'
E
F
MAIN SPEAKERS terminal
SUB WOOFERS terminal
F'

Fig.6

■ Removing the front panel assembly (See Fig.7 to 9)

- Prior to performing the following procedure, remove the metal cover and the CD changer mechanism assembly.

1. Remove the four screws **G** attaching the front panel assembly on the bottom of the body.
2. Disconnect the card wire from connector CN865 on the main board.
3. Disconnect the card wire from connector CN315 on the input / output board respectively.
4. Disconnect the harness from connector CN901 on the relay board on the back of the front panel assembly.
5. Disconnect the harness from connector CN912 on the input / output board.
6. Disconnect connector CN870 and CN871 on the input/output board from the main board.
7. Release the two joints a and b on the lower part of the sides using a screwdriver, and remove the front panel assembly toward the front.

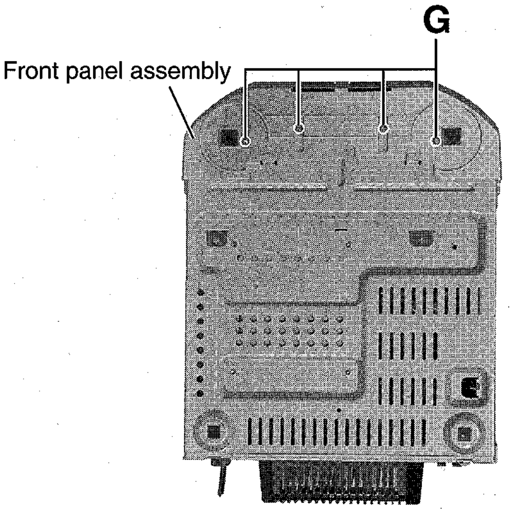

G
Front panel assembly

Fig.7

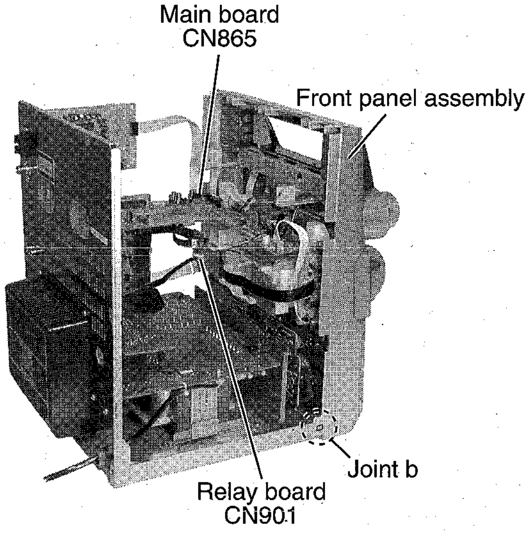

Main board
CN865
Front panel assembly
Joint b
Relay board
CN901

Fig.8

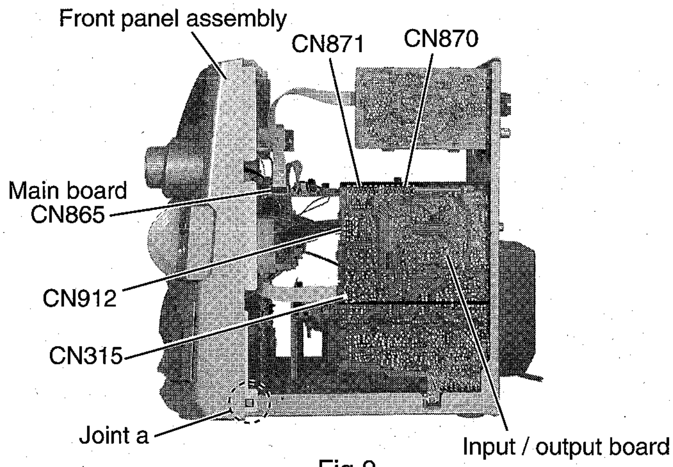

Front panel assembly
CN871
CN870
Main board
CN865
CN912
CN315
Joint a
Input / output board

Fig.9

<Front panel assembly>

■ Removing the Microphone terminal board assembly (See Fig.10 and 11)

(Only microphone terminal board is installed model.)

1. Pull out the MIC volume knob from the front side.
2. Remove the two screws **H** attaching the microphone terminal board assembly.
3. Remove the screw **I** attaching earth wire.

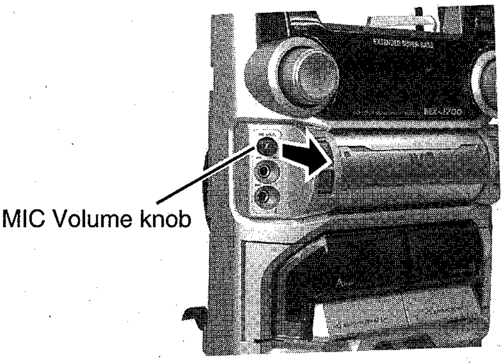

MIC Volume knob

Fig.10

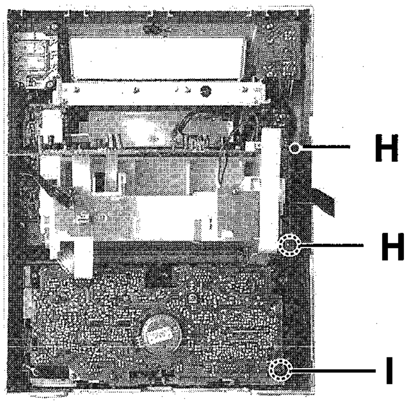


Fig.11

■ Removing the rolling panel assembly (See Fig.12 and 13)

1. Disconnect the harness from connector CN900 on the relay board on the back of the rolling panel assembly.
2. Disconnect the harness from connector CN862, CN863, CN850, CN851 and CN815 on the main board respectively. Disconnect the card wire from connector CN880 on the main board.
3. Disconnect the card wire from connector CN869 and the harness from CN883 and CN884 on the main board respectively.
4. Remove the four screws **J** attaching the rolling panel assembly.

   ATTENTION: For the harness which should be connected to connector CN869, CN883 and CN884 on the main board, get them through the slots under the rolling panel when reattaching the rolling panel assembly to the front panel (Refer to Fig.13)

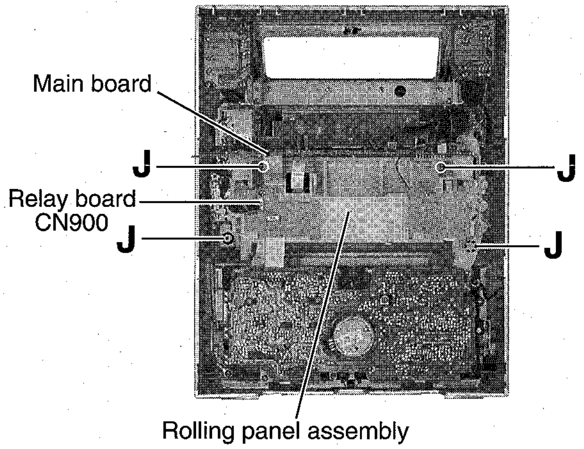

Main board
J
J
Relay board
CN900
J
J
Rolling panel assembly

Fig.12

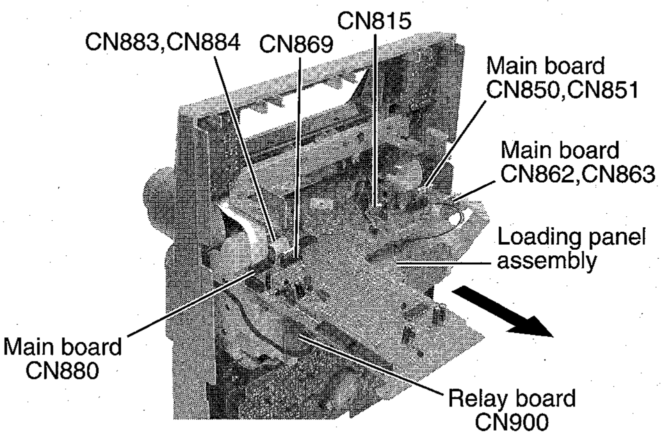

CN815
CN883,CN884
CN869
Main board
CN850,CN851
Main board
CN862,CN863
Loading panel
assembly
Main board
CN880
Relay board
CN900

Fig.13

■Removing the main board (See Fig.14 and 15)

- Prior to performing the following procedure, remove the front panel assembly, the microphone terminal board and the rolling panel assembly.

1. Disconnect the harness from connector CN867 on the main board.
2. Disconnect the card wire from connector CN879 on the main board (Before pulling out the card wire, stand the part c of CN879 as shown in Fig.15).
3. Remove the two screws **K** attaching the main board.

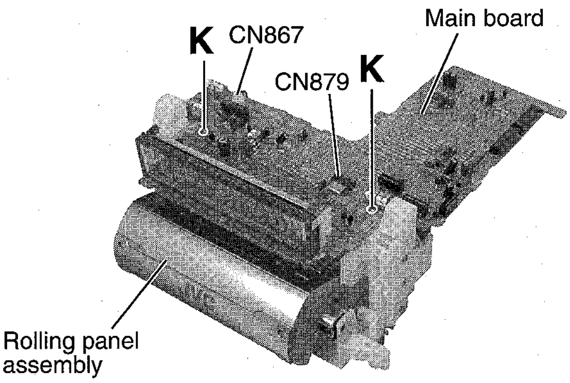

K
CN867
CN879
K
Main board
Rolling panel assembly

Fig.14

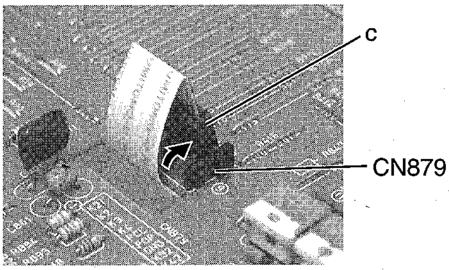


Fig.15

■Removing the cassette mechanism assembly (See Fig.16)

- Prior to performing the following procedure, remove the front panel assembly.

1. Disconnect the card wire from connector CN306 on the cassette mechanism board.
2. Remove the eight screws **L** and **L'** attaching the cassette mechanism assembly.

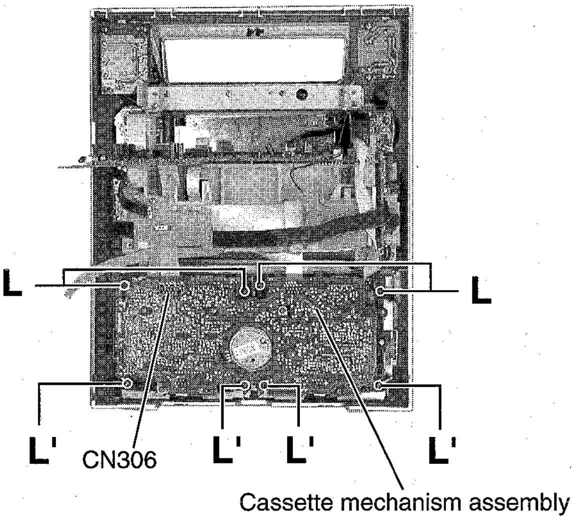

L
L
L'
CN306
L'
L'
L'
Cassette mechanism assembly

Fig.16

■Removing the boards in the front panel assembly (See Fig.17 to 19)

- Prior to performing the following procedure, remove the front panel assembly and the rolling panel assembly.

— Function board1 (See Fig.17) —

1. Remove the two screws **M** attaching the function board 1.

— Function board2 (See Fig.17) —

1. Remove the two screws **N** attaching the function board 2.

— Bass-level regulator board (See Fig.18) —

1. Pull out the level knob on the front side of the front panel assembly and remove the nut attaching the bass-level regulator board.
2. Release the two joints d. Unsolder FW951 on the bass-level regulator board and disconnect the harness connected to the power switch.

— Main volume & headphone board (See Fig.18) —

1. Pull out the volume knob on the front side of the front panel assembly and remove the nut attaching the main volume & headphone board.
2. Remove the two screws **O** attaching the main volume & headphone board on the back of the front panel assembly and release the two joints e.
3. Unsolder FW850 on the main volume & headphone board and disconnect the harness connected to the eject switch board.
4. Remove the screw **L'** attaching the earth terminal extending from the main volume & headphone board.

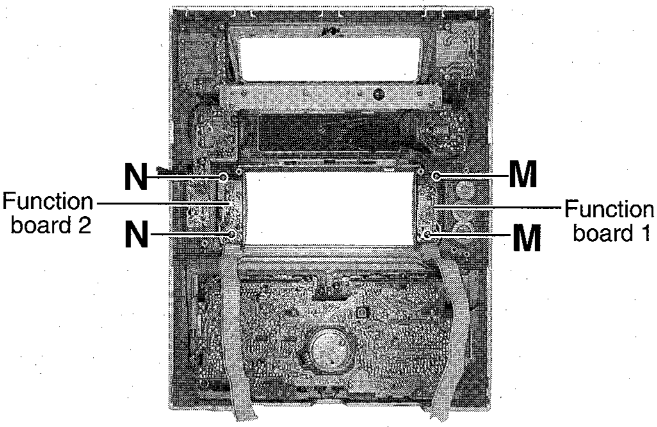

N
M
Function board 2
Function board 1
N
M

Fig.17

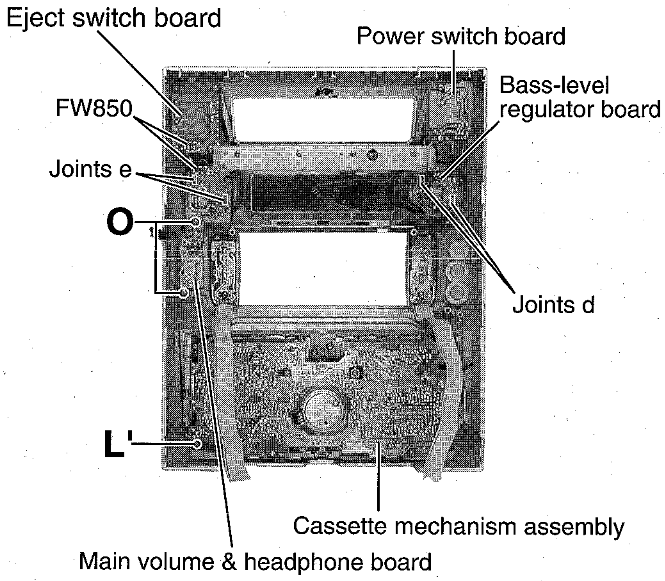

Eject switch board
Power switch board
Bass-level regulator board
FW850
Joints e
O
Joints d
L'
Cassette mechanism assembly
Main volume & headphone board

Fig.18

— Power switch board (See Fig.19) —

1. Remove the two screws **P** attaching the power switch board. Unsolder FW951 on the power switch board and disconnect the harness extending to the bass-level regulator board.

— Eject switch board (See Fig.19) —

1. Remove the four screws **Q** attaching the eject switch board. Unsolder FW850 on the eject switch board and disconnect the harness extending to the main volume & headphone board.

— Remote control port board (See Fig.19) —

1. Remove the screw **R** attaching the remote control port board.

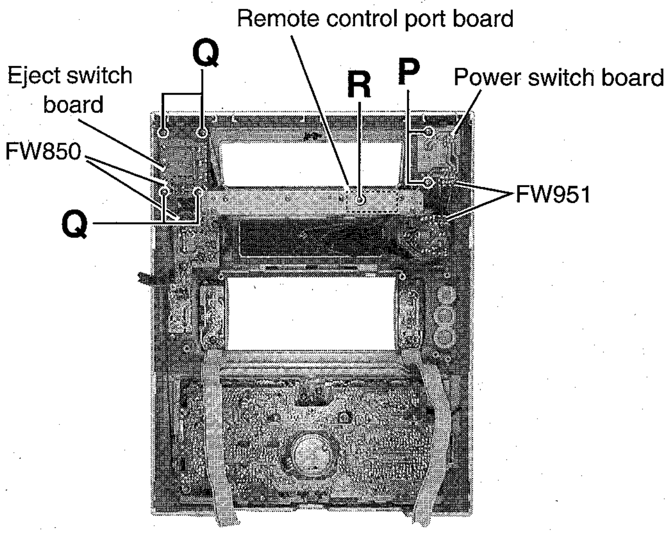

Remote control port board
Q
Eject switch board
R
P
Power switch board
FW850
FW951
Q

Fig.19

■ Removing the relay board and fixing board (See Fig.20)

- Prior to performing the following procedure, remove the metal cover.

※There is no need to remove the front panel assembly.

1. Disconnect the harness from connector CN900 and CN901 on the relay board on the back of the rolling panel assembly.
2. Remove the screw **S** attaching the relay board. Release the tab f and remove the relay board from the groove g.
3. Remove the screw **S'** attaching the fixing board and remove the fixing board from the groove h.

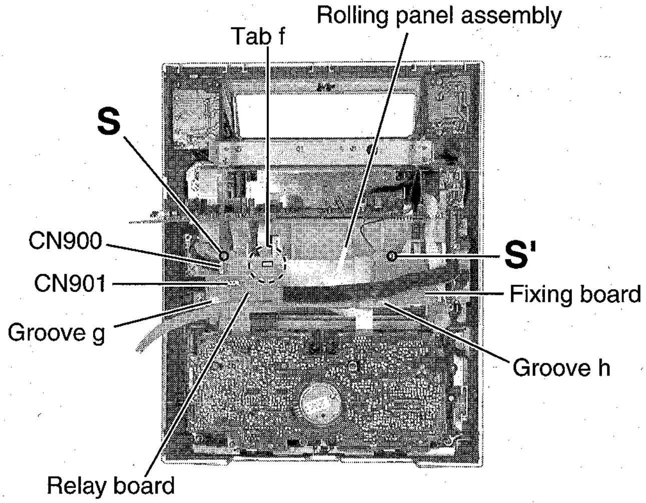

Rolling panel assembly
Tab f
S
CN900
S'
CN901
Fixing board
Groove g
Groove h
Relay board

Fig.20

<Rear panel assembly>

■ Removing the tuner board (See Fig.21 and 22)

- Prior to performing the following procedure, remove the metal cover.

1. Remove the two plastic rivets attaching the joint board, and remove the joint board.
2. Disconnect the card wire from connector CN1 on the tuner board.
3. Remove the two screws **T** attaching the tuner board on the back of the body.

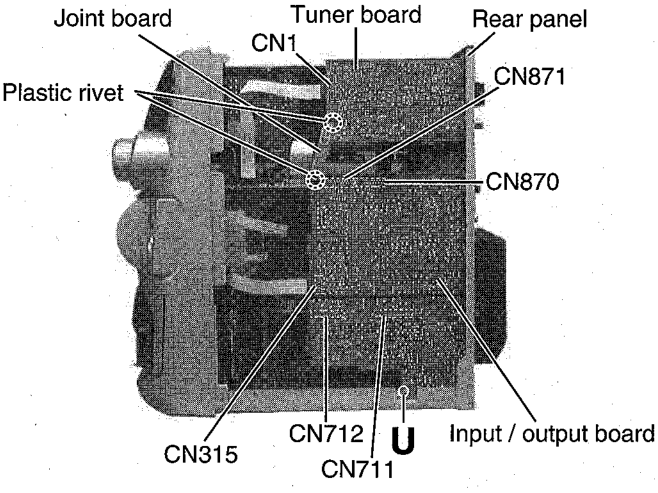

Joint board
Tuner board
Rear panel
CN1
CN871
Plastic rivet
CN870
CN315
CN712
U
CN711
Input / output board

Fig.21

■ Removing the input / output board (See Fig.21 and 22)

- Prior to performing the following procedure, remove the metal cover.

1. Remove the two plastic rivets attaching the joint board, and remove the joint board.
2. Disconnect the card wire from connector CN315 on the input / output board.
3. Remove the screw **U** attaching the input / output board on the lower right side of the body.
4. Remove the five screws, **E, F** & **F'** attaching the Aux, MAIN speaker, SUB speaker terminal board on the back of the body.
5. Remove the screw **E'** attaching the digital output terminal on the back of the body.
6. Disconnect connector CN870, CN871, CN711 and CN712 on the input / output board by pulling out them outward. Remove the input / output board from the body.

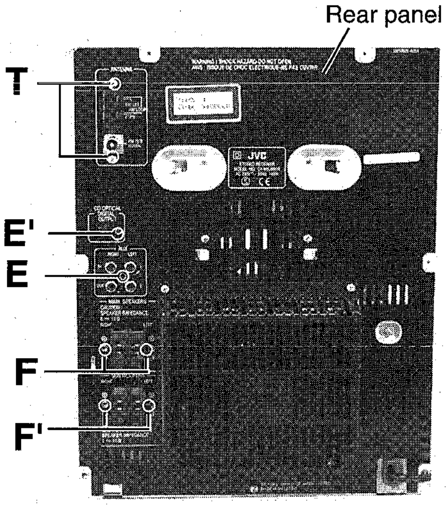

Rear panel
T
E'
E
F
F'

Fig.22

■Removing the fan motor assembly (See Fig.23 and 24)

- Prior to performing the following procedure, remove the metal cover and CD changer mechanism assembly.

1. Remove the two screws **V** attaching the fan motor assembly on the back of the body.
2. Cut the band i banding the harness.
3. Disconnect the harness from connector CN703 on the power amplifier & regulator board.

ATTENTION: When removing the CN703, remove the INPUT/OUTPUT board first.

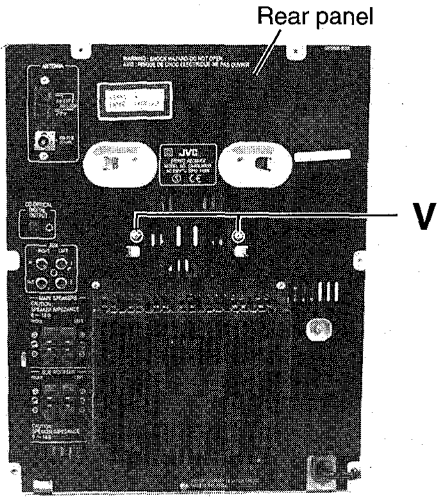


Fig.23

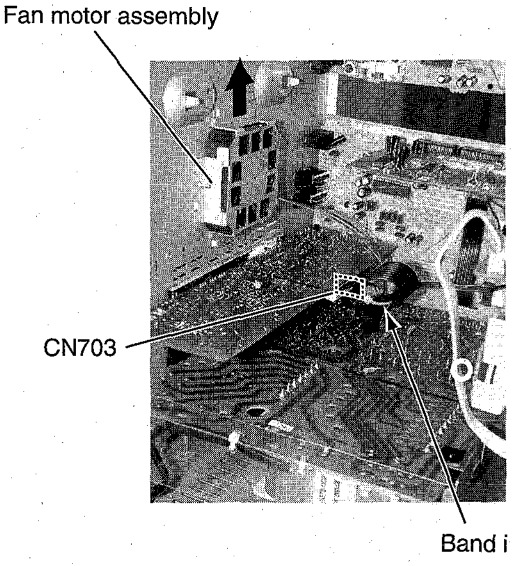


Fig.24

■ Removing the rear cover / rear panel (See Fig.25 to 28)

- Prior to performing the following procedure, remove the metal cover and the CD changer mechanism assembly.

※There is no need to remove the front panel assembly.

1. Remove the two screws **W** attaching the rear cover on the back of the body.
2. Remove the five screws **E** & **F**, **F'** attaching Aux, MAIN speaker and sub speaker board to the rear panel on the back of the body.
3. Remove the screw **E'** attaching the digital output terminal on the back of the body.
4. Remove the five screws **X** attaching the heat sink, voltage selector and the preamplifier board to the rear panel on the back of the body.
5. Remove the two screws **X'** attaching the voltage selector to the rear panel on the back of the body. (Only ver. U)
6. Remove the screw **Y** attaching the rear panel to the base chassis on the back of the body.
7. Release the two joints j and k on the rear panel bottom using a screwdriver, and detach the rear panel backward.
8. Remove the tuner board in case of necessity (Refer to Fig.21).

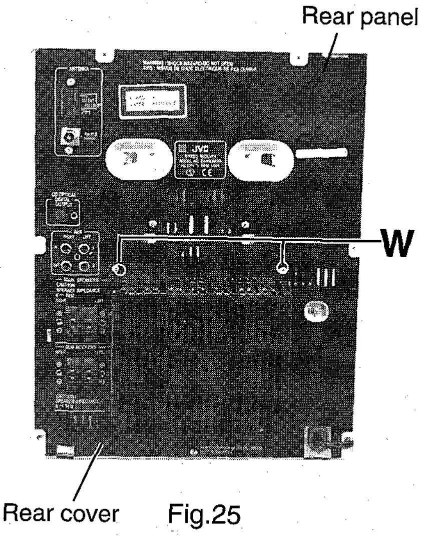


Fig.25

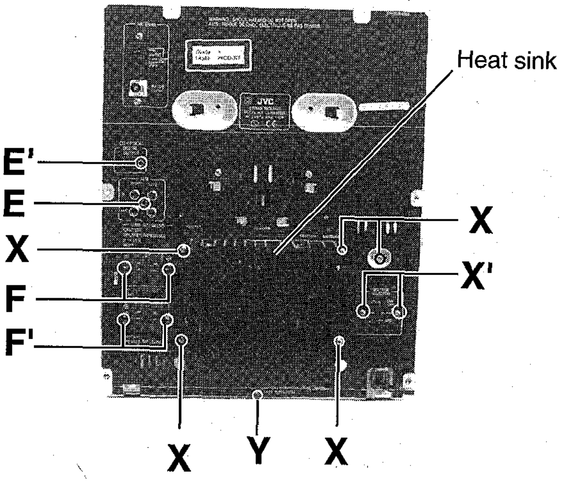


Fig.26

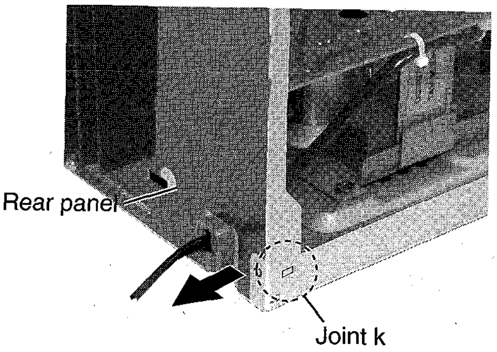


Fig.28

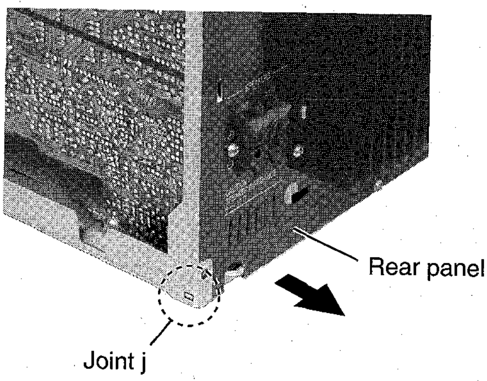


Fig.27

■Removing the preamplifier board / heat sink (See Fig.29 to 31)

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly and the rear cover / rear panel.

※There is no need to remove the front panel assembly.

1. Remove the input / output board (Refer to Fig.21 and 22).
2. Disconnect the harness from connector CN901 on the relay board on the back of the rolling panel assembly.
3. Disconnect the harness from connector CN713 on the preamplifier board.
4. Remove the two screws **Z** attaching the heat sink to the power & main amplifier board on the back of the body.
5. Remove the two screws **A** & **A'** attaching the amplifier board and IC to the heat sink and detach them with the heat sink bracket.

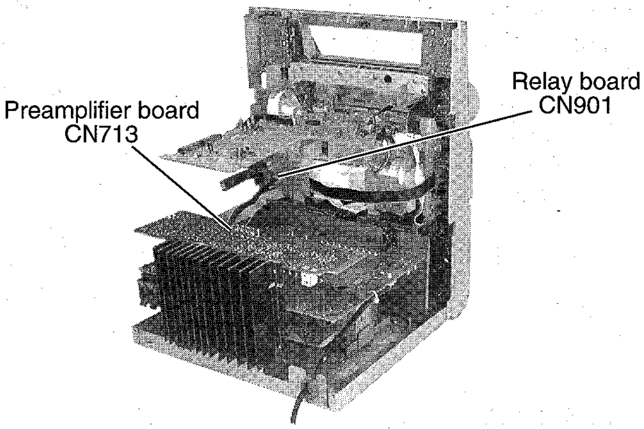

Preamplifier board
CN713
Relay board
CN901

Fig.29

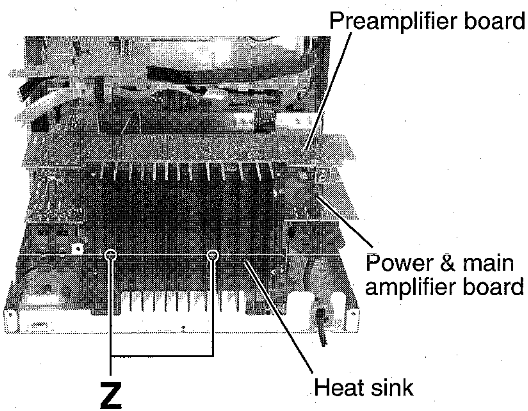

Preamplifier board
Power & main amplifier board
Heat sink
Z

Fig.30

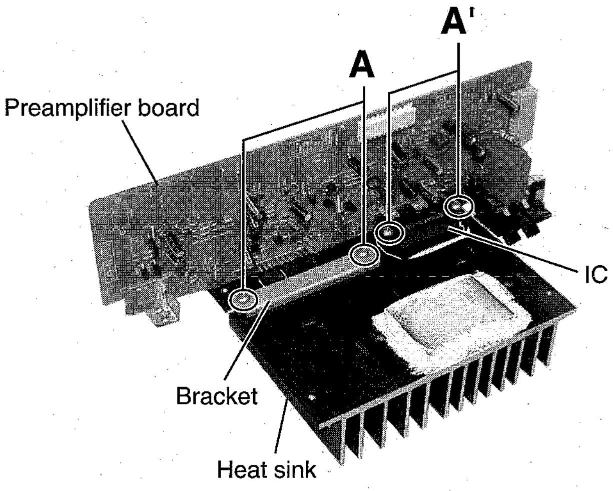

A'
A
Preamplifier board
IC
Bracket
Heat sink

Fig.31

■Removing the power & main amplifier board (See Fig.32 and 33)

- Prior to performing the following procedure, remove the metal cover, the CD changer mechanism assembly, the rear cover / rear panel, the input & output board / preamplifier board.

1. Remove the four screws **B** attaching the transf. on the power & main amplifier board through the upper side slots.
2. Remove the two plastic rivets fixing the power & main amplifier board.
3. Remove the cord stopper by pushing it upward.
4. Cut off the bands l and m fixing the power cord and unsolder the soldered part on the power & main amplifier board.

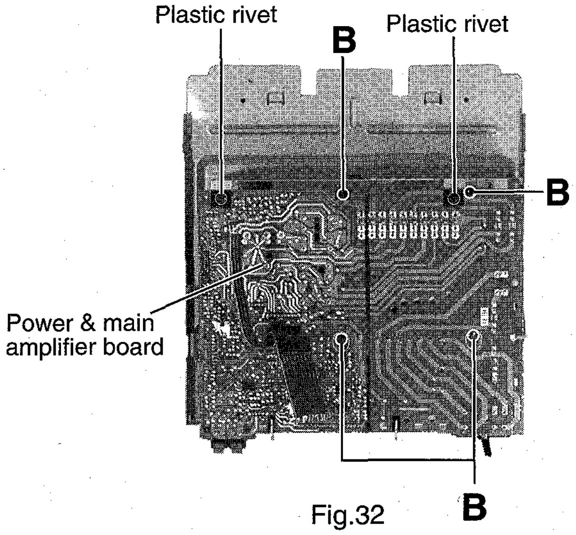

Plastic rivet
B
Plastic rivet
B
Power & main amplifier board
B

Fig.32

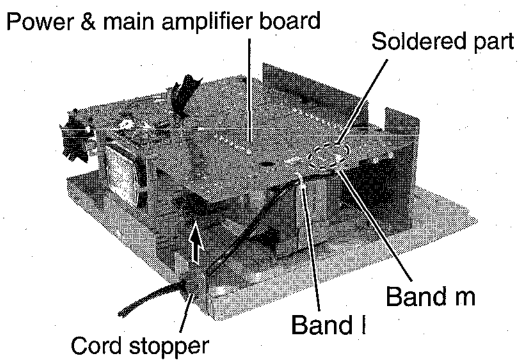

Power & main amplifier board
Soldered part
Band m
Band l
Cord stopper

Fig.33

<Rolling panel assembly>

■Removing the multicontrol assembly (See Fig.34 to 36)

- Prior to performing the following procedure, remove the rolling panel assembly.

1. Remove the two screws **C** attaching the multicontrol assembly on both sides.
2. Remove the multicontrol assembly outward while pushing the right and left hooks fixing multicontrol assembly outward.

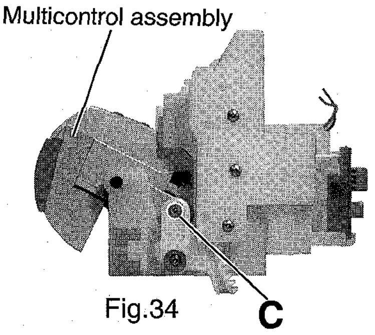

Multicontrol assembly
C

Fig.34

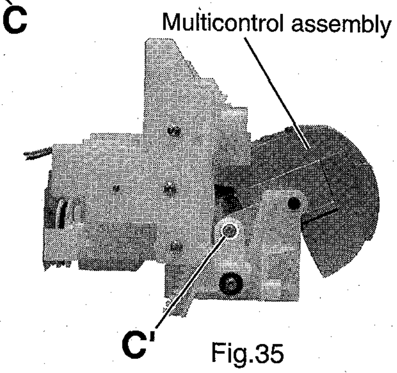

Multicontrol assembly
C'

Fig.35

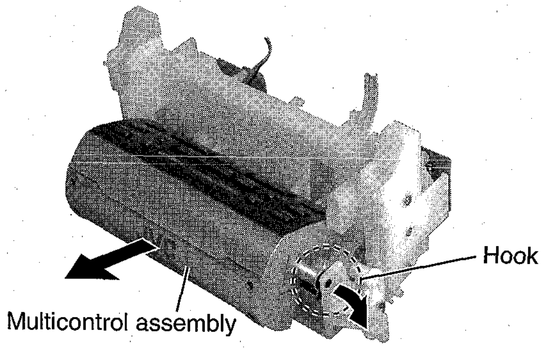

Hook
Multicontrol assembly

Fig.36

■Removing the multicontrol board (See Fig.37 to 39)

- Prior to performing the following procedure, remove the rolling panel assembly and the multicontrol assembly.

1. Remove the six screws **D** attaching the cover and the bracket.
2. Pull out the right and left panel holders outward by releasing the tabs n outward.
3. Remove the cover and the bracket.
4. Remove the fore screws **E** attaching the multicontrol board.

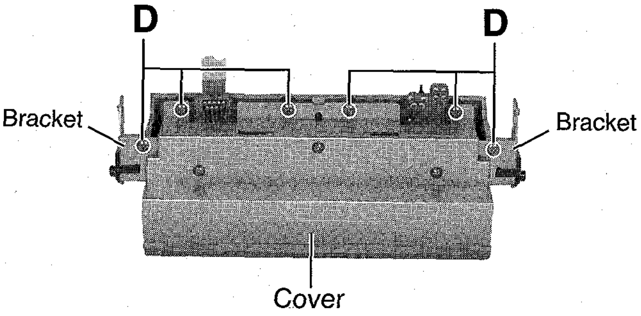

D
D
Bracket
Bracket
Cover

Fig.37

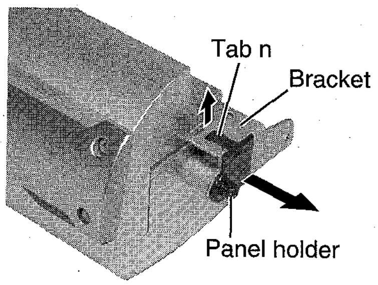

Tab n
Bracket
Panel holder

Fig.38

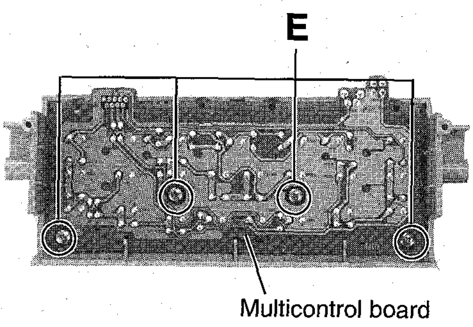

E
Multicontrol board

Fig.39

■Removing the drive motor assembly (See Fig.40 to 42)

- Prior to performing the following procedure, remove the rolling panel assembly and the multicontrol assembly.

1. Remove the relay board / fixing board (Refer to Fig.20).
2. Remove the two screws **F** attaching the motor bracket and remove the motor lead staple o.
3. Remove the two screws **G** attaching the shaft bracket.
4. Remove the motor belt.
5. Remove the shaft assembly upward while pulling the keep plates p on both sides of the shaft assembly outward.
6. Remove the drive motor upward.

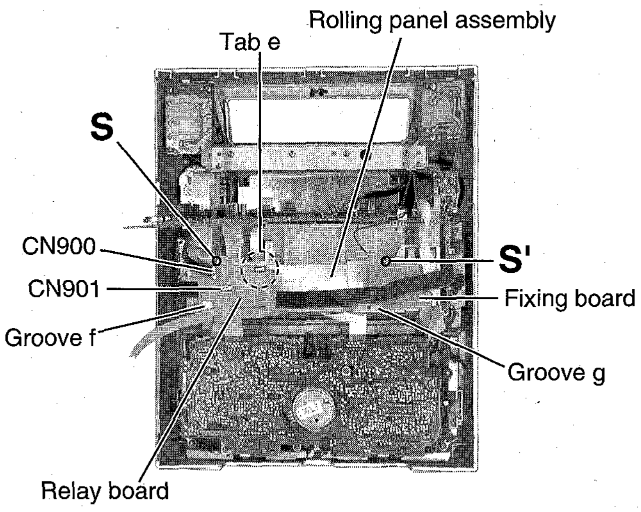

Tab e
Rolling panel assembly
S
S'
CN900
CN901
Fixing board
Groove f
Groove g
Relay board

Fig.20

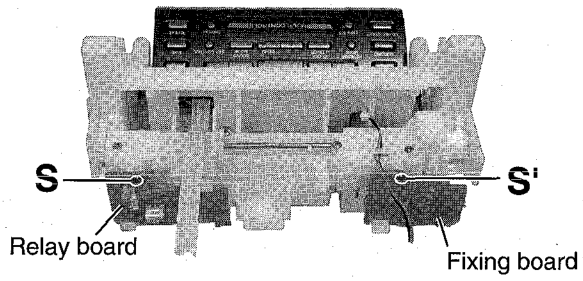

S
S'
Relay board
Fixing board

Fig.40

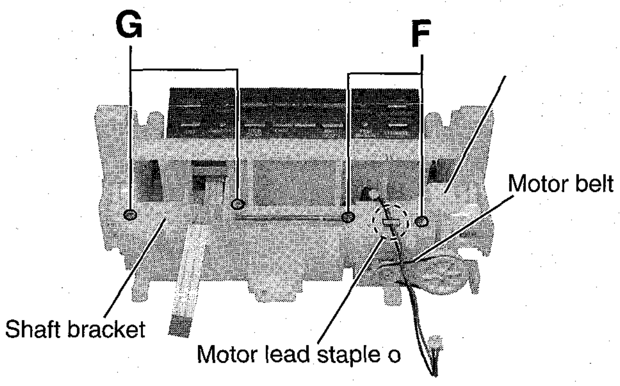

G
F
Motor belt
Shaft bracket
Motor lead staple o

Fig.41

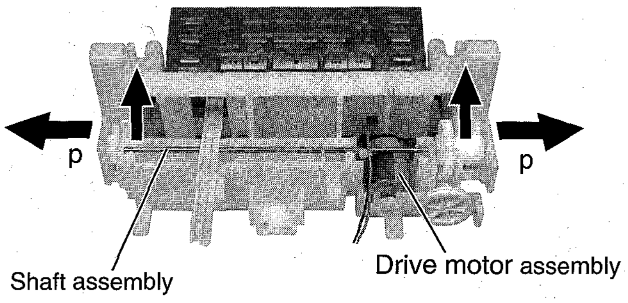

p
p
Shaft assembly
Drive motor assembly

Fig.42

≪CD Changer Mechanism Type:VC3 Section≫

■ Removing the CD Servo control board (See Fig.1)

1. Remove the metal cover.
2. Remove the CD changer mechanism assembly.
3. From bottom side the CD changer mechanism assembly, remove the two screws **A** retaining the CD servo control board.
4. Absorb the four soldered positions "a" of the right and left motors with a soldering absorber.
5. Pull out the earth wire on the CD changer mechanism assembly.
6. The two screws **B** is removed and C.B.holder is detached.
7. Disconnect the connector CN854 on the CD servo control board.
8. Disconnect the card wire CN601 and the connector CN801 on the CD servo control board.

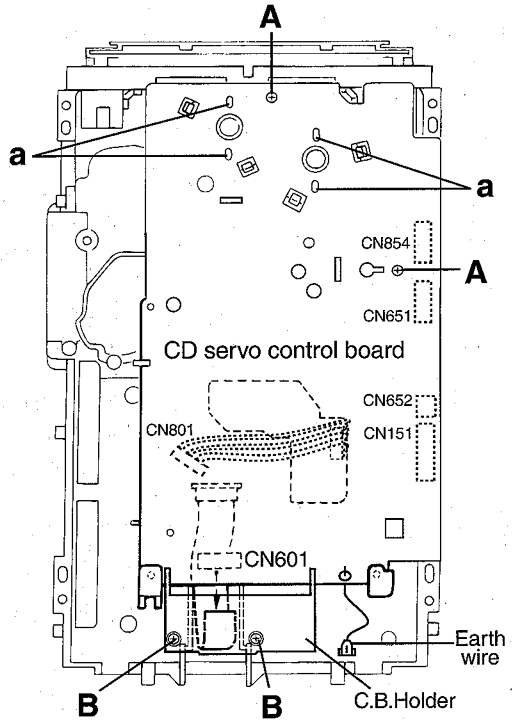

A
a
a
CN854
A
CN651
CD servo control board
CN652
CN801
CN151
CN601
Earth wire
B
B
C.B.Holder

Fig.1

■ Removing the CD tray assembly (See Fig.2~4)

1. Remove the front panel assembly.
2. Remove the CD changer mechanism assembly.
3. Remove the CD Servo control board.
4. Remove the screw **C'** retaining the lod stopper.
5. From the T.bracket section "b" and clamper base section "c" , remove both of the edges fixing the rod(See Fig.2 and 3).
6. Remove the screw **D** retaining the disc stopper (See Fig.3).
7. Remove the three screws **E** retaining the T.bracket (See Fig.3).
8. Remove the screw **F** retaining the clamper assembly (See Fig.3).
9. From the left side face of the chassis assembly, remove the one screw **G** retaining both of the return spring and lock lever(See Fig. 4).
10. By removing the pawl at the section "d" fixing the return spring, dismount the return spring(See Fig.4).
11. Remove the three lock levers(See Fig.4).

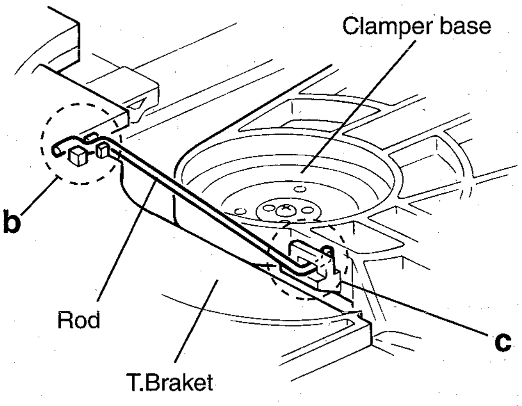

Clamper base
b
Rod
c
T.Braket

Fig.2

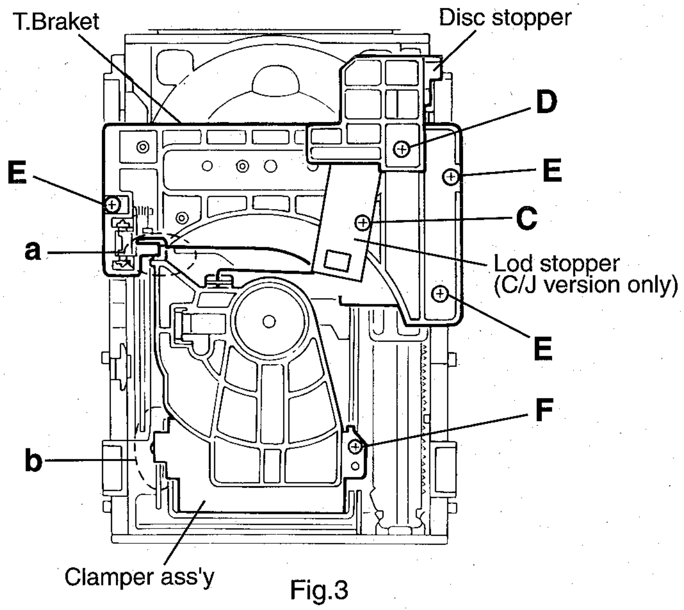

T.Braket
Disc stopper
D
E
E
C
a
Lod stopper
(C/J version only)
E
F
b
Clamper ass'y

Fig.3

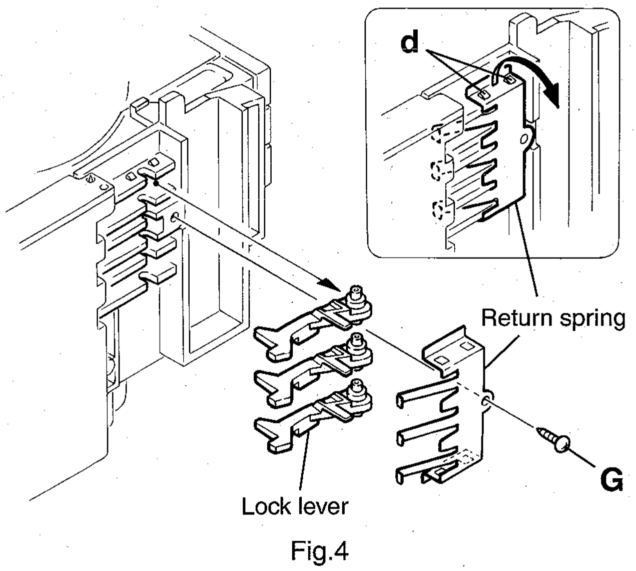

d
Return spring
G
Lock lever

Fig.4

11. Check whether the lifter unit stopper has been caught into the hole at the section "e" of CD tray assembly as shown in Fig.5.
12. Make sure that the driver unit elevator is positioned as shown in Fig.6 from to the second or fifth hole on the left side face of the CD changer mechanism assembly.

[Caution] In case the driver unit elevator is not at above position, set the elevator to the position as shown in Fig.7 by manually turning the pulley gear as shown in Fig.8.

13. Manually turn the motor pulley in the clockwise direction until the lifter unit stopper is lowered from the section "e" of CD tray assembly(See Fig.8).
14. Pull out all of the three stages of CD tray assembly in the arrow direction "f" until these stages stop (See Fig.6).
15. At the position where the CD tray assembly has stopped, pull out the CD tray assembly while pressing the two pawls "g and g' " on the back side of CD tray assembly(See Fig.9). In this case, it is easy to pull out the assembly when it is pulled out first from the stage CD tray assembly.

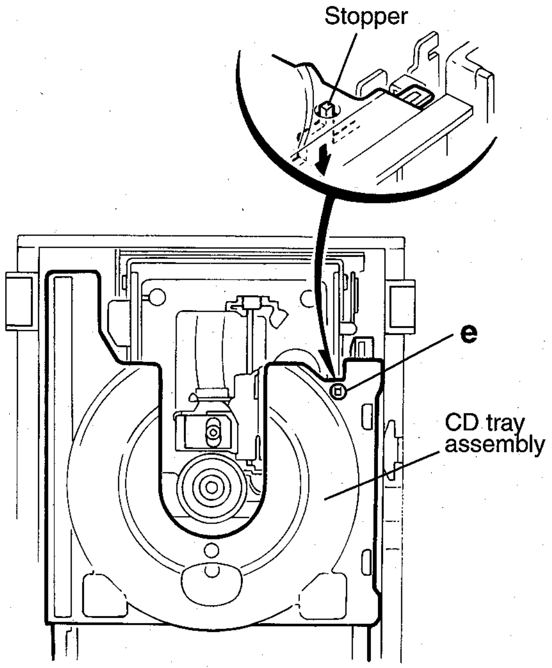

Stopper
e
CD tray assembly

Fig.5

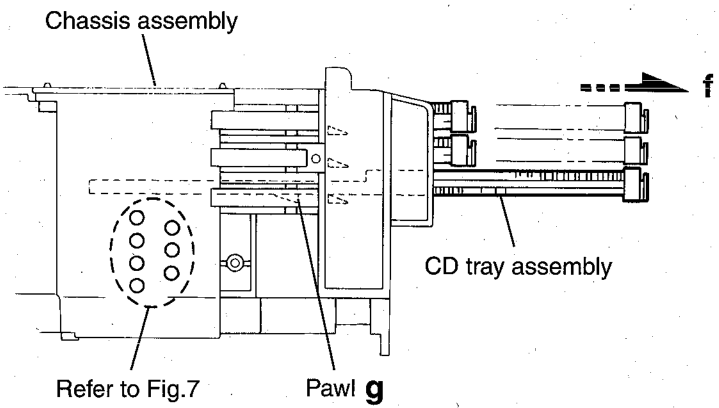

Chassis assembly
f
CD tray assembly
Refer to Fig.7
Pawl g

Fig.6

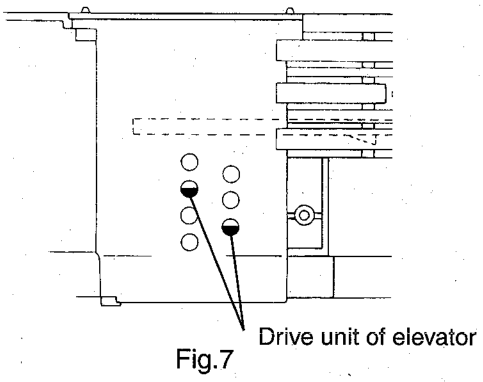

Drive unit of elevator

Fig.7

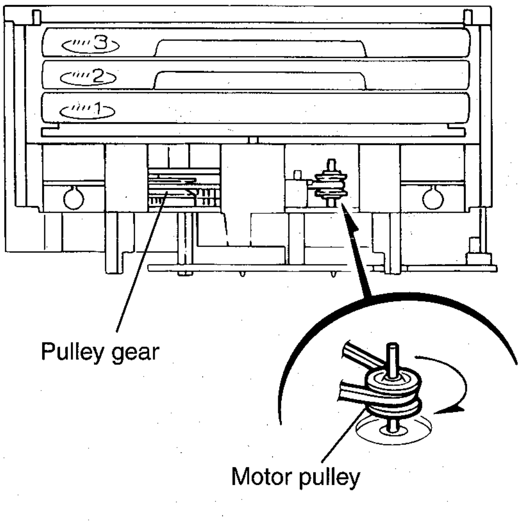

3
2
1
Pulley gear
Motor pulley

Fig.8

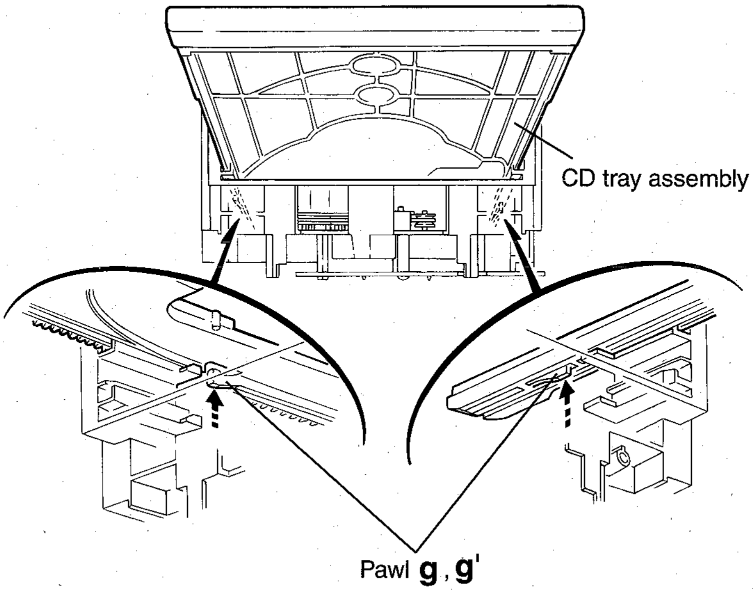

CD tray assembly
Pawl g , g'

Fig.9

■ Removing the CD loading mechanism assembly(See Fig.10)

1. While turning the cams R1 and R2 assembly in the arrow direction "h" ,align the shaft "i" of the CD loading mechanism assembly to the position shown in Fig.10.
2. Remove the four screws **H** retaining the CD loading mechanism assembly.

■ Removing the CD traverse mechanism (See Fig.11 and 12)

1. For dismounting only the CD traverse mechanism without removing the CD loading mechanism assembly, align the shaft "j" of the CD loading mechanism assembly to the position shown Fig.11 while turning the cam R1 and R2 assembly in the arrow direction "k" .
2. By raising the CD loading mechanism assembly in the arrow direction "l", remove the assembly from the lifter unit

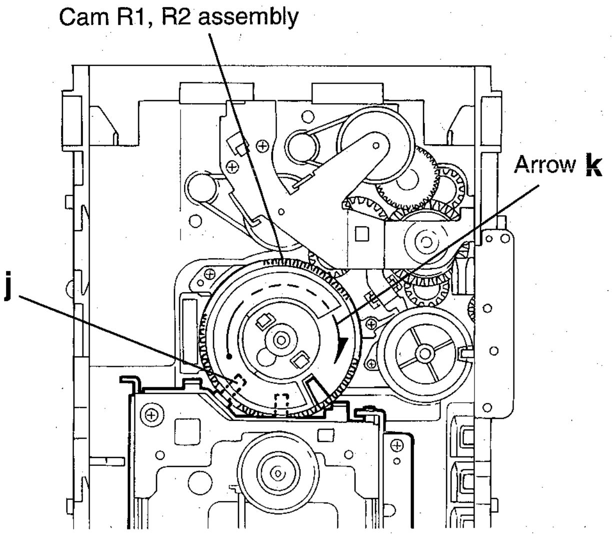

Cam R1, R2 assembly
Arrow k
j

Fig.11

■ Removing the CD pick unit (See Fig.13)

1. Move the cam gear in the arrow direction "m" . Then, the CD pickup unit will be moved in the arrow direction "n" .
2. According to the above step, shift the CD pickup unit to the center position.
3. While pressing the stopper retaining the shaft in the arrow direction "o" , pull out the shaft in the arrow direction "p".
4. After dismounting the shaft from the CD pickup unit, remove the CD pickup unit

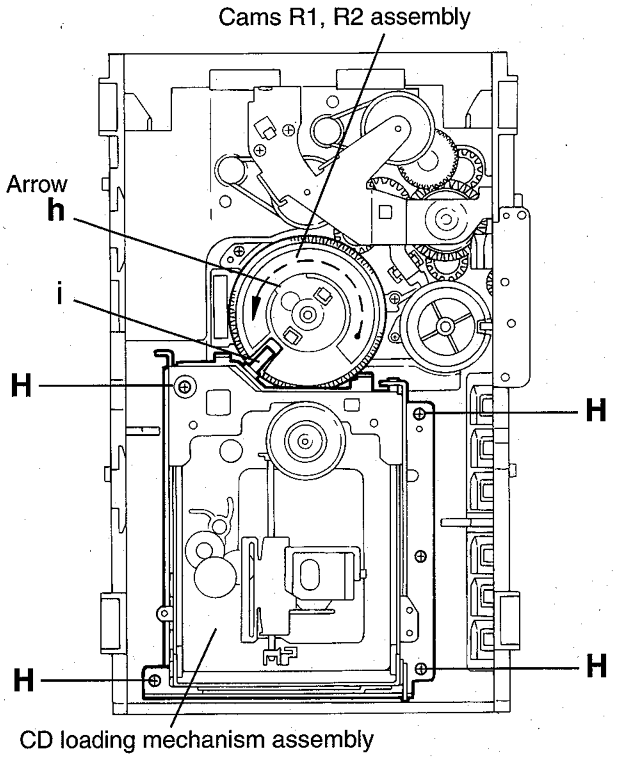

Cams R1, R2 assembly
Arrow
h
i
H
H
H
H
CD loading mechanism assembly

Fig.10

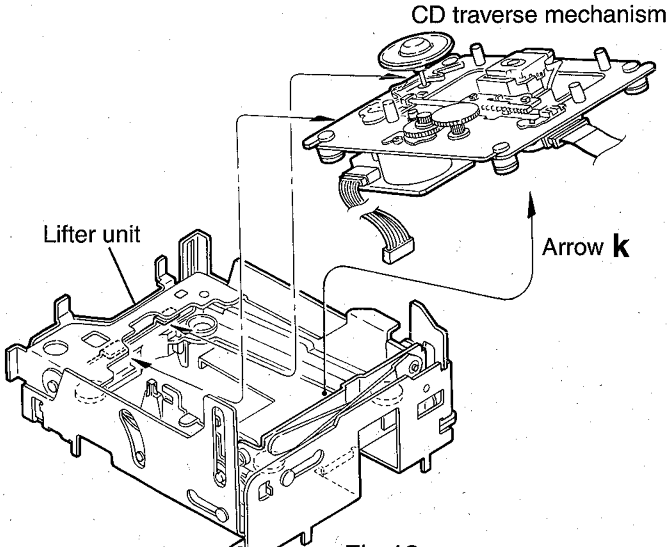

CD traverse mechanism
Lifter unit
Arrow k

Fig.12

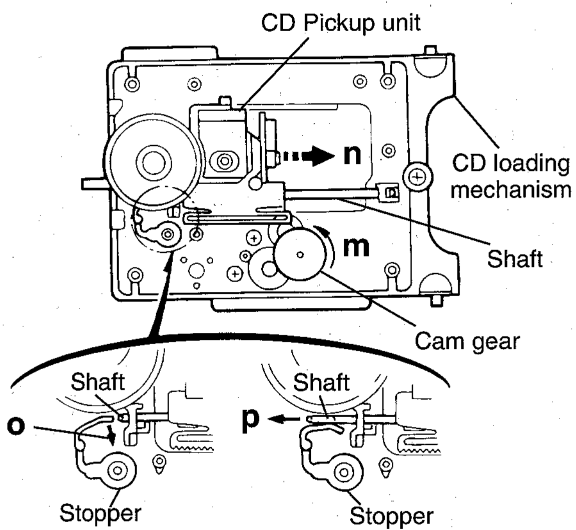

CD Pickup unit
n
CD loading mechanism
m
Shaft
Cam gear
Shaft
Shaft
o
p
Stopper
Stopper

Fig.13

■ Removing the cam unit (See Fig.14 ~17)

1. Remove the CD loading mechanism assembly.
2. While turning the cam gear "q", align the pawl "r" position of the drive unit to the notch position(Fig.16) on the cam gear "q".
3. Pull out the drive unit and cylinder gear(See Fig.17).
4. While turning the cam gear "q", align the pawl "s" position of the select lever to the notch position(Fig.18) on the cam gear "q".
5. Remove the four screws **J** retaining the cam unit(cam gear "q" and cams R1/R2 assembly)(See Fig.18).

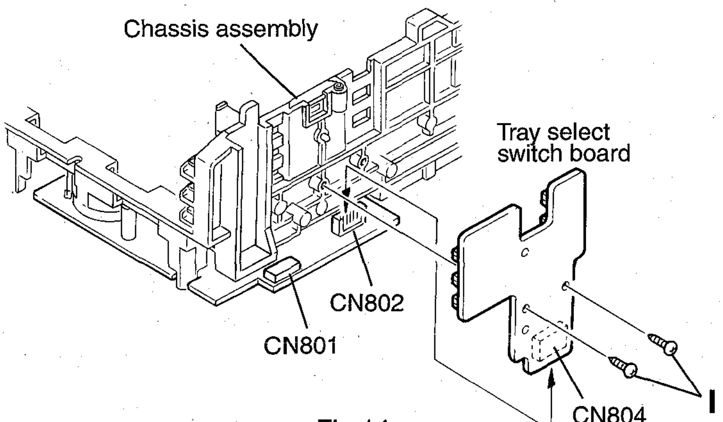

Chassis assembly
Tray select switch board
CN802
CN801
CN804
I

Fig.14

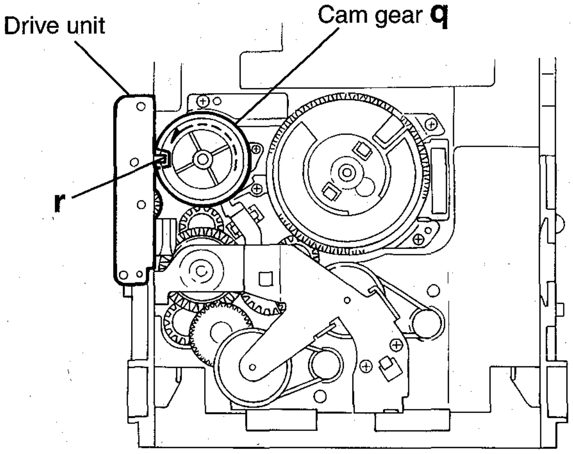

Drive unit
Cam gear q
r

Fig.15

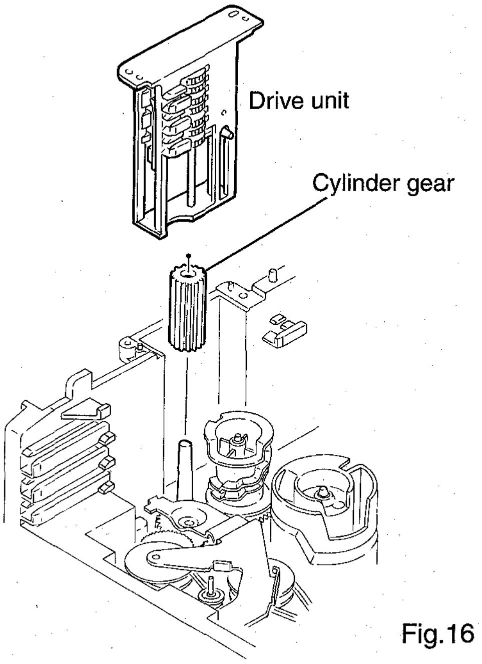

Drive unit
Cylinder gear

Fig.16

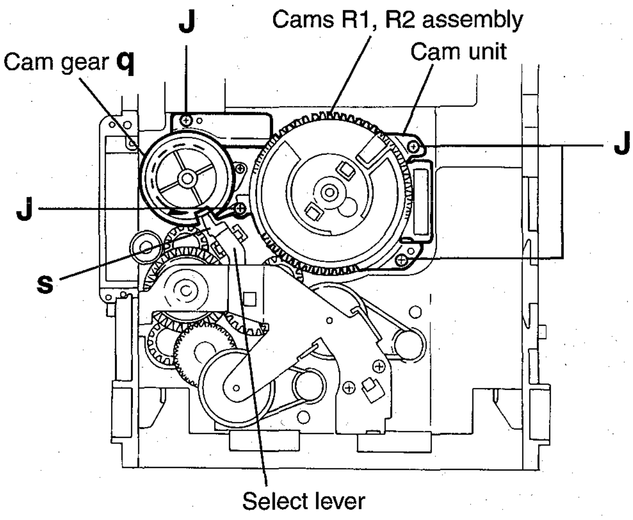

J
Cams R1, R2 assembly
Cam unit
Cam gear q
J
J
s
Select lever

Fig.17

■ Removing the actuator motor and belt (See Fig.18~21)

1. Remove the two screws **K** retaining the gear bracket (See Fig.19).
2. While pressing the pawl "t" fixing the gear bracket in the arrow direction, remove the gear bracket (See Fig.19).
3. From the notch "u section" on the chassis assembly fixing the edge of gear bracket, remove and take out the gear bracket(See Fig. 20).
4. Remove the belts respectively from the right and left actuator motor pulleys and pulley gears(See Fig. 19).
5. After turning over the chassis assembly, remove the actuator motor while spreading the four pawls "v" fixing the right and left actuator motors in the arrow direction(See Fig. 21).

[Note] When the chassis assembly is turned over under the conditions wherein the gear bracket and belt have been removed, then the pulley gear as well as the gear, etc. constituting the gear unit can possibly be separated to pieces. In such a case, assemble these parts by referring to the assembly and configuration diagram in Fig. 22.

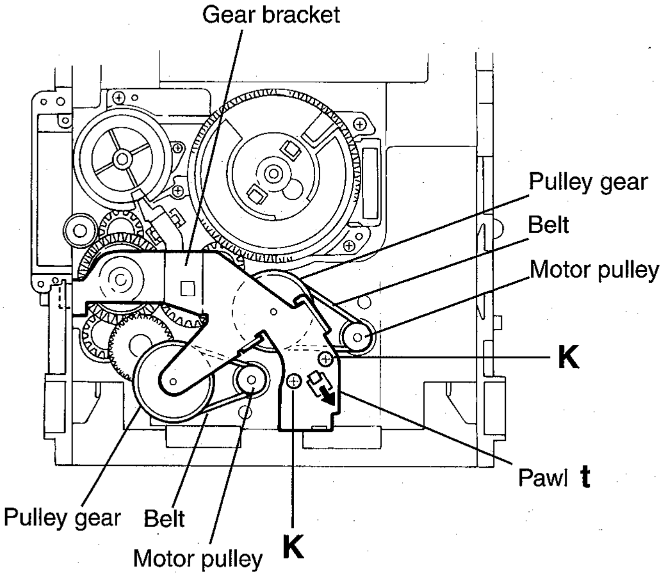

Gear bracket
Pulley gear
Belt
Motor pulley
K
Pawl t
Pulley gear
Belt
Motor pulley
K

Fig.18

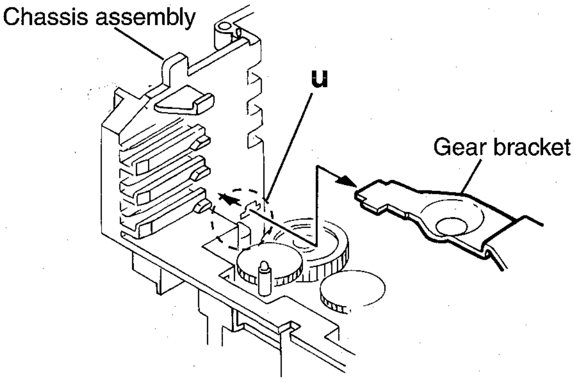

Chassis assembly
u
Gear bracket

Fig.19

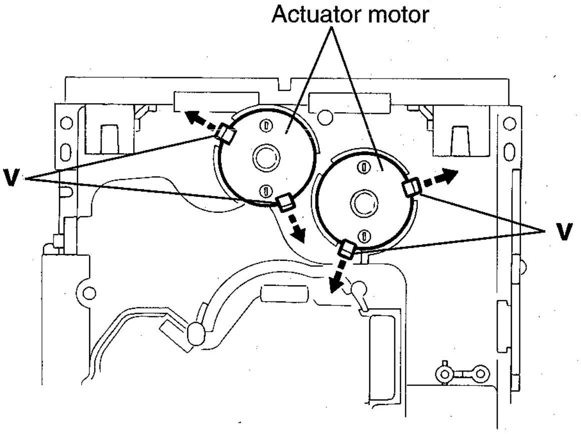

Actuator motor
V
V

Fig.20

Assembly and Configuration Diagram

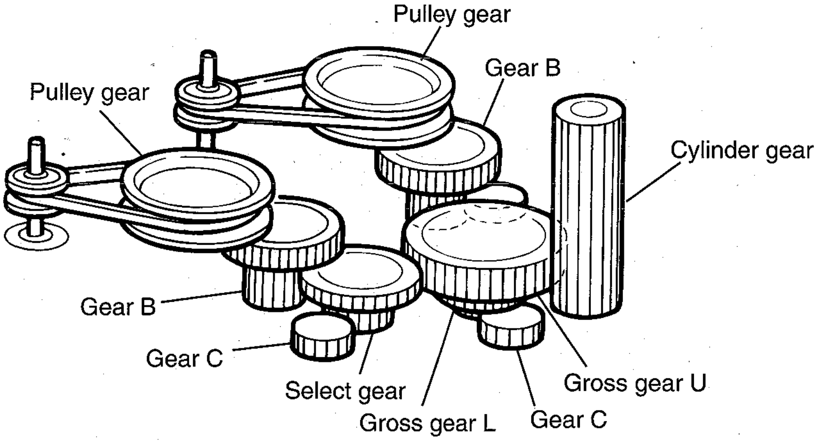

Pulley gear
Gear B
Pulley gear
Cylinder gear
Gear B
Gear C
Select gear
Gross gear L
Gear C
Gross gear U

Fig.21

■ Removing the cams R1/R2 assembly and cam gear q(See Fig.22)

1. Remove the slit washer fixing the cams R1 and R2 assembly.
2. By removing the two pawls "w" fixing the cam R1, separate R2 from R1.
3. Remove the slit washer fixing the cam gear "q".
4. Pull out the cam gear "q" from the C.G. base assembly.

■ Removing the C.G. base assembly (See Fig.22 and 23)

Remove the three screws **L** retaining the C.G. base assembly.

[Caution] To reassemble the cylinder gear, etc.with the cam unit (cam gear and cans R1/R2 assembly), gear unit and drive unit, align the position of the pawl "x" on the drive unit to that of the notch on the cam gear "q". Then, make sure that the gear unit is engaged by turning the cam gear "q" (See Fig. 24).

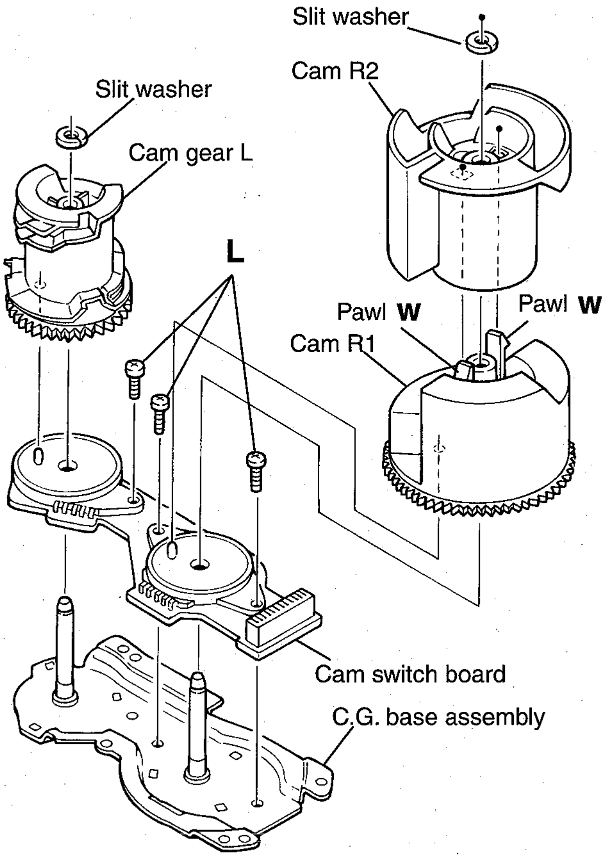

Slit washer
Cam R2
Slit washer
Cam gear L
L
Pawl W
Pawl W
Cam R1
Cam switch board
C.G. base assembly

Fig.22

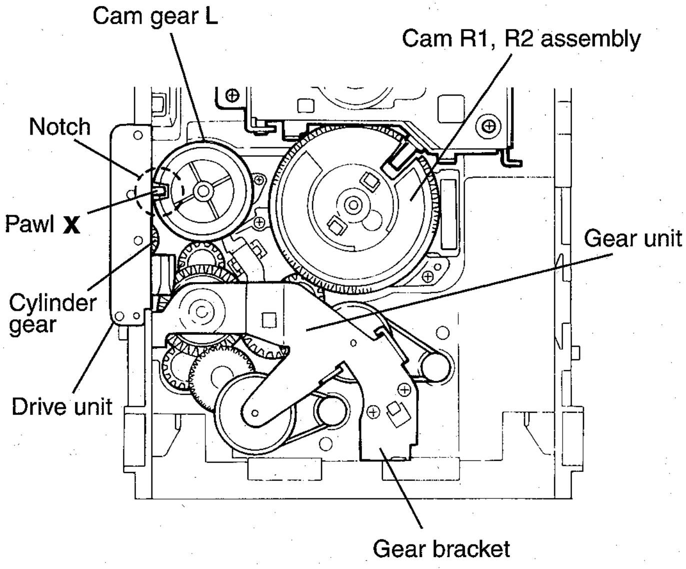

Cam gear L
Cam R1, R2 assembly
Notch
Pawl X
Gear unit
Cylinder gear
Drive unit
Gear bracket

Fig.23

< Cassette mechanism section >

■ Removing the playback,recording and eraser heads (See Fig.1~3)

1. While shifting the trigger arms seen on the right side of the head mount in the arrow direction,turn the flywheel R in counterclockwise direction until the head mount has gone out with a click (See Fig. 1).
2. When the flywheel R is rotated in counterclockwise direction, the playback head will be turned in counterclockwise direction from the position in Fig.2 to that in Fig.3.
3. At this position, disconnect the flexible P.C.board (outgoing from the playback head) from the connector CN301 on the head amp. and mechanism control P.C. board.
4. After dismounting the FPC holder,remove the flexible P.C.board.
5. Remove the flexible P.C.board from the chassis base.
6. Remove the spring "a" from behind the playback head.
7. Loosen the reversing azimuth screw retaining the playback head.
8. Take out the playback head from the front of the head mount.
9. The recording and eraser heads should also be removed similarly according to Steps 1~8 above.

● Reassembling the playback, recording and eraser heads (See Fig.2,3)

1. Reassemble the playback head from the front of the head mount to the position as shown in Fig.3.
2. Fix the reversing azimuth screw.
3. Set the spring a from behind the playback head.
4. Attach the flexible P.C.board to the chassis base, and fix it with the FPC holder as shown in Fig.3.
5. The recording and eraser heads should also be reassembled similarly according to Steps 1~4 above.

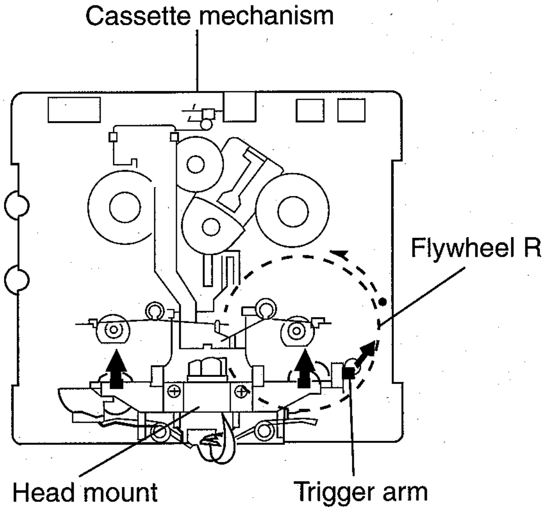

Cassette mechanism
Flywheel R
Head mount
Trigger arm

Fig.1 (Mechanism A side)

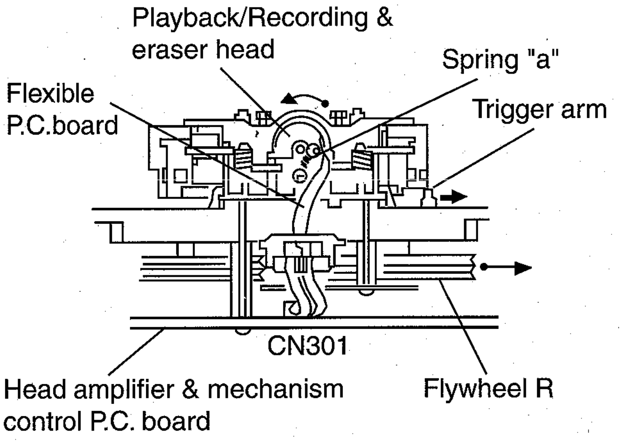

Playback/Recording & eraser head
Spring "a"
Flexible P.C.board
Trigger arm
CN301
Head amplifier & mechanism control P.C. board
Flywheel R

Fig.2 (Mechanism A side)

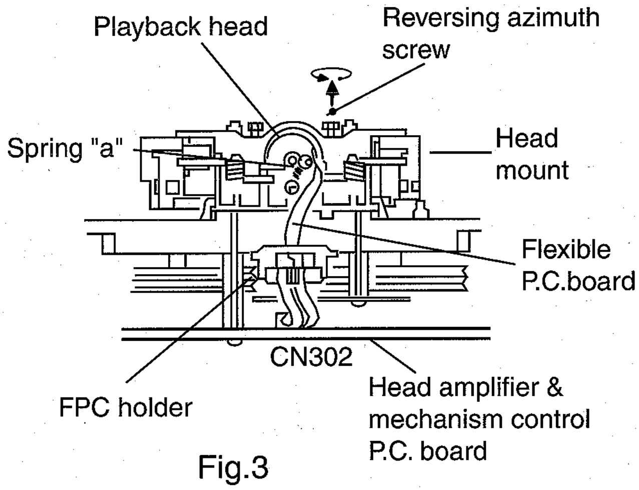

Playback head
Reversing azimuth screw
Spring "a"
Head mount
Flexible P.C.board
CN302
FPC holder
Head amplifier & mechanism control P.C. board

Fig.3

(Mechanism B side)

■ Removing the head amp.and mechanism control P.C.board (See Fig. 4)

1. Remove the cassette mechanism assembly.
2. After turning over the cassette mechanism assembly,remove the five screws "A" retaining the head amp. and mechanism control P.C. board
3. Disconnect the connectors CN303 and CN304 on the P.C.Board and the connectors CN1 on both the right and left side reel pulse P.C.Boards.
4. When necessary, remove the 4pin parallel wire soldered to the main motor

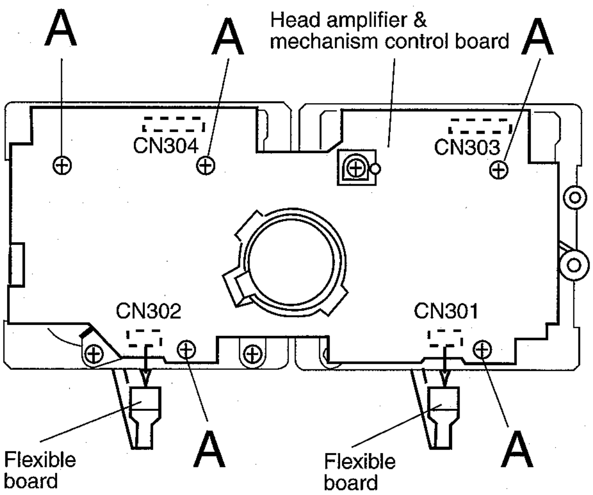

A
A
Head amplifier & mechanism control board
A
CN304
CN303
CN302
CN301
Flexible board
A
Flexible board
A

Fig.4

■ Removing the capstan motor assembly

1. Remove the six screws "B" retaining capstan motor assembly (See Fig. 5).
2. While raising the capstan motor, remove the capstan belts A and B respectively from the motor pulley (See Fig. 6).

Caution 1: Be sure to handle the capstan belts so carefully that these belts will not be stained by grease and other foreign matter. Moreover, these belts should be hand while referring to the capstan belt hanging method.

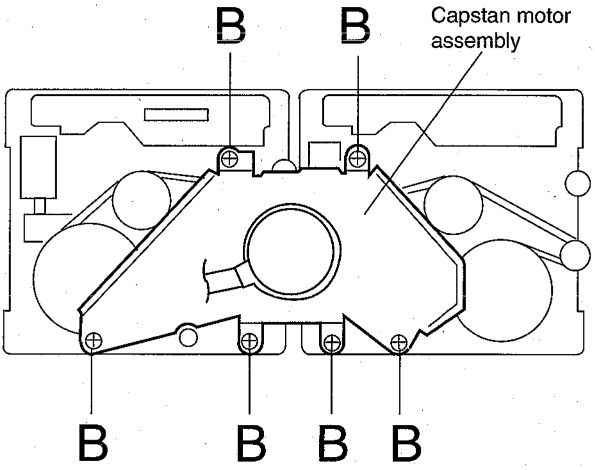

B
B
Capstan motor assembly
B
B
B
B

Fig.5

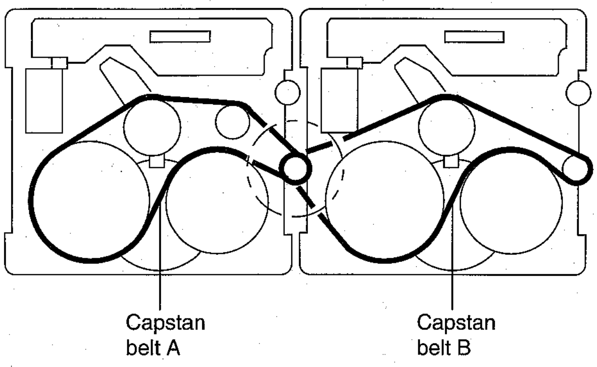

Capstan belt A
Capstan belt B

Fig.7

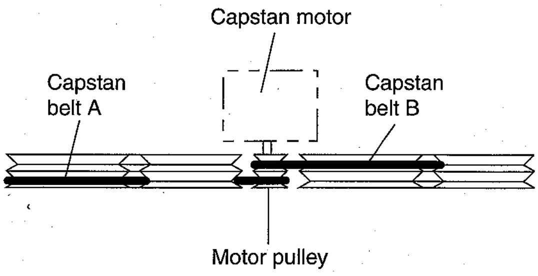

Capstan motor
Capstan belt A
Capstan belt B
Motor pulley

Fig.6

■ Removing the capstan motor (See Fig. 8)

From the joint bracket, remove the two screws "C" retaining the capstan motor.

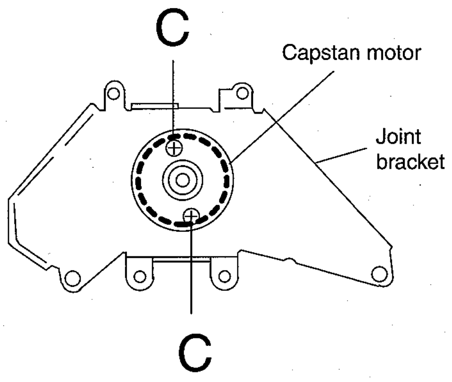

C
Capstan motor
Joint bracket
C

Fig.8

■ Removing the flywheel (See Fig. 9,10)

1. Remove the head amp. and mechanism control P.C.Board.
2. Remove the capstan motor assembly.
3. After turning over the cassette mechanism, remove the slit washers "a" and "b" fixing the capstan shafts R and L, and pull out the flywheels R and L respectively from behind the cassette mechanism.

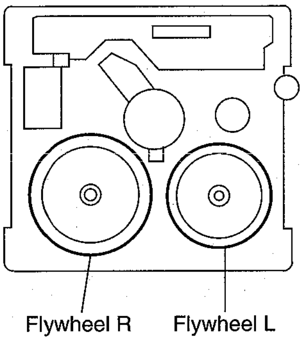

Flywheel R
Flywheel L

Fig.10

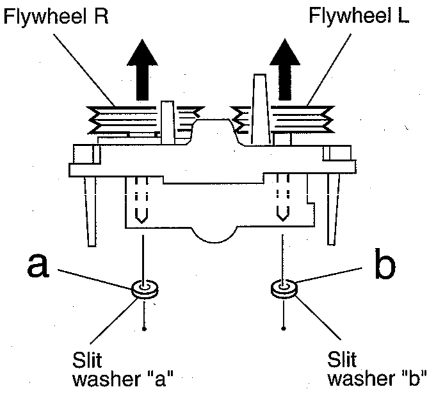

Flywheel R
Flywheel L
a
b
Slit washer "a"
Slit washer "b"

Fig.9

■ Removing the reel pulse P.C.board and solenoid (See Fig. 11)

1. Remove the five pawls (c,d,e,f,g) retaining the reel pulse P.C.Board.
2. From the surface of the reel pulse P.C.Board parts, remove the two pawls "h" and "i" retaining the solenoid.

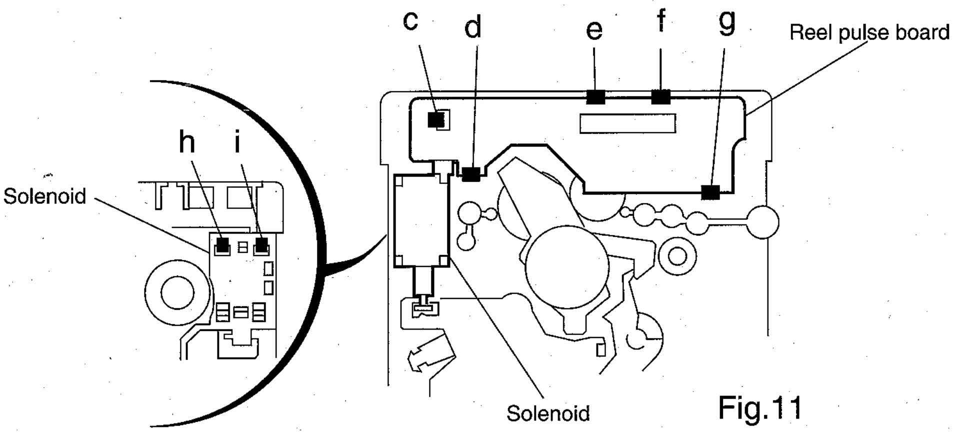

c
d
e
f
g
Reel pulse board
h
i
Solenoid
Solenoid

Fig.11

Adjustment method

Measurement instruments required for adjustment

1. Low frequency oscillator,
   This oscillator should have a capacity to output 0dBs to 600ohm at an oscillation frequency of 50Hz-20kHz.
2. Attenuator impedance : 600ohm
3. Electronic voltmeter
4. Frequency counter
5. Wow flutter meter
6. Test tape
   VTT712 : For Tape speed and wow flutter (3kHz)
   VTT724 : For Reference level (1kHz)
   TMT7036 : For Head angle(10kHz),Play back frequency characteristics(1kHz),and dubbing frequency characteristics(63,1,10kHz)
   Because of frequency-mixed tape with 63,1k,10k and 14kHz(250nWb/m -24dB).
   Use this tape together with a filter.
7. Blank tape
   TAPE Ⅰ: AC-225, TAPE Ⅱ: AC-514
8. Torque gauge : For play and back tension
   Forward ; TW2111A, Reverse ; TW2121A
   Fast Forward and Rewind ; TW2231A
9. Test disc
   : CTS-1000(12cm),GRG-1211(8cm)
10. Jitter meter

Measurement conditions

Power supply voltage
AC120V(60Hz) : J,C model
AC230V(50Hz) : B,E,EN model
AC110/127/220/230-240V(50/60Hz) : U model

Measurement
output terminal : Speaker out
:TP101(Mesuring for TUNER/DECK/CD)
:Dummy load 6ohm

Radio input signal

AM modulation frequency : 400Hz
Modulation factor : 30%
FM modulation frequency : 400Hz
Frequency displacement : 22.5kHz

Frequency Range

AM	530kHz~1710kHz	J,C
	531kHz~1710kHz	U
	522kHz~1629kHz	B,E,EN
LW	144kHz~288kHz	B,E,EN
FM	87.5MHz~108MHz	

Standard measurement positions of volume and switch

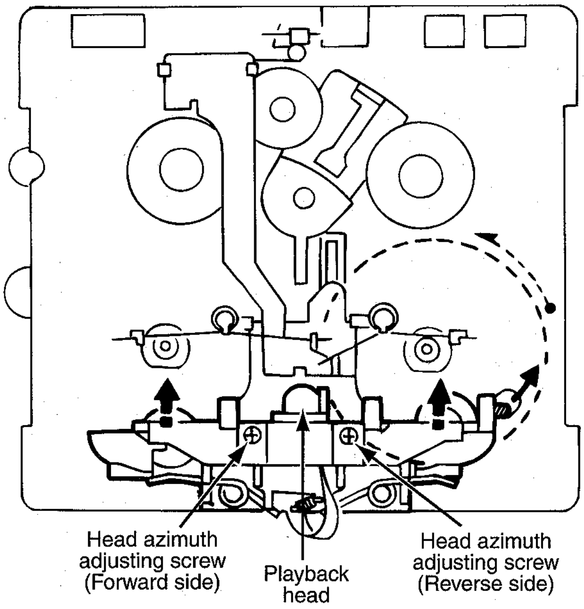
Power : Standby (Light STANDBY Indicator)
S,A,BASS : OFF
Sound mode : OFF
Main VOL. : 0 Minimum
Travers mecha set position : Disc 1
Mic MIX VOL : MAX(Only ver. U)
ECHO : OFF (Only ver. U)

Precautions for measurement

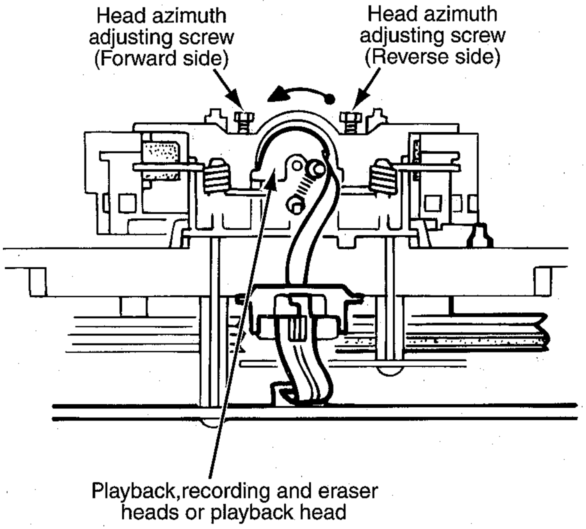
1. Apply 30pF and 33kohm to the IF sweeper output side and 0.082 F and 100kohm in series to the sweeper input side.
2. The IF sweeper output level should be made as low as possible within the adjustable range.
3. Since the IF sweeper is a fixed device, there is no need to adjust this sweeper.
4. Since a ceramic oscillator is used, there is no need to perform any MPX adjustment.
5. Since a fixed coil is used, there is no need to adjust the FM tracking.
6. The input and output earth systems are separated. In case of simultaneously measuring the voltage in both of the input and output systems with an electronic voltmeter for two channels, therefore, the earth should be connected particularly.
7. In the case of BTL connection amplifier, the minus terminal of speaker is not for earthing. Therefore, be sure not to connect any other earth terminal to this terminal. This system is of an OTL system.

■Arrangement of adjusting positions

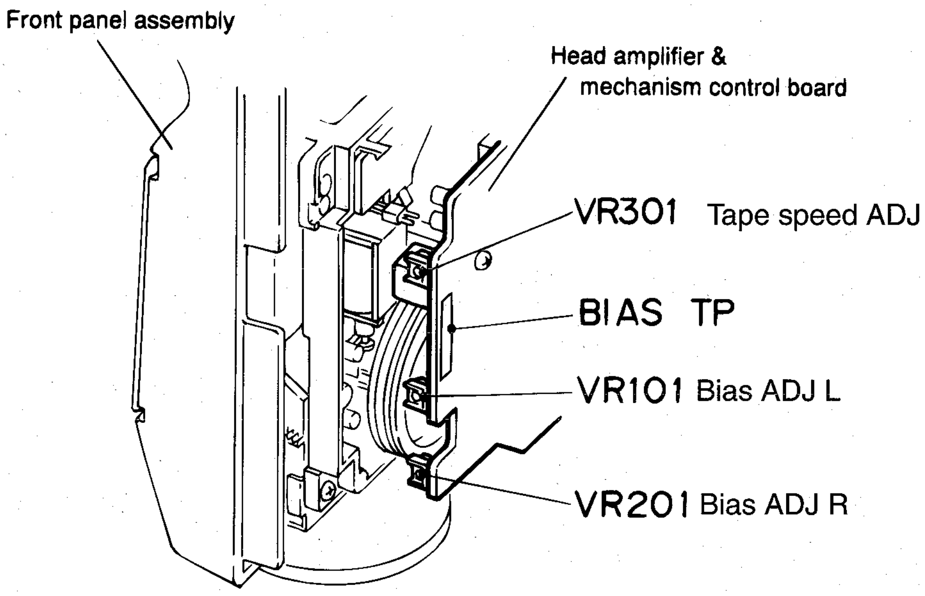
Cassette mechanism section (Mechanism A section)


Head azimuth adjusting screw (Forward side)
Playback head
Head azimuth adjusting screw (Reverse side)

Cassette mechanism section (Back side)


Head azimuth adjusting screw (Forward side)
Head azimuth adjusting screw (Reverse side)
Playback,recording and eraser heads or playback head

Cassette Mechanism Unit Section


Front panel assembly
Head amplifier & mechanism control board
VR301 Tape speed ADJ
BIAS TP
VR101 Bias ADJ L
VR201 Bias ADJ R

■ Tape recorder section

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Confirmation of head angle	Test tape :TMT7036(10kHz) Measurement output terminal :Speaker terminal Speaker R (Load resistor:3Ω) :Headphone terminal	1.Playback the test tape TMT7036(10kHz). 2.With the playback mechanism or recording & playback mechanism, adjust the head azimuth screw so that the forward and reverse output levels become maximum.After adjustment,lock the head azimuth at least by half a turn. 3.In either case,this adjustment should be performed in both the forward and reverse directions with the head azimuth screw.	Maximum output	Adjust the head azimuth screw only when the head has been changed.
Confirmation of tape speed	Test tape :VTT712(3kHz) or TMT7036(3kHz) Measurement output terminal :Headphone terminal	<Constant speed> Adjust VR301 so that the frequency counter reading becomes 3,000Hz±60Hz when playing back the test tape VTT712(3kHz)with the playback mechanism or playback and recording mechanism after ending forward winding of the tape.	Tape speed of decks (A and B) :3,000Hz ±60Hz	VR301

■ Reference values for confirmation items

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Double tape speed	Test tape :TMT7036(10kHz) Measurement output terminal :Speaker terminal Speaker R (Load resistance:3Ω) measurement output terminal :Headphone terminal	After setting to the double speed motor, confirm that the frequency counter reading becomes 4,800+400/-300Hz when the test tape VTT712 (3kHz) has been play back with the playback mechanism.	4,800+400/ -300Hz	Playback mechanism side
Difference between the forward and reverse speed. P.mecha and R/P mecha speed		When the test tape VTT712(3kHz) has been played back with the playback mechanism or recording and playback mechanism at the beginning of forward winding, the frequency counter reading of the difference between both of the mechanisms should be 6.0Hz or less.	60Hz or less	Both the playback and recording & playback mechanism
Wow & flutter	Test tape :TMT7036(10kHz) Measurement output terminal :Headphone terminal	When the test tape VTT712(3kHz) has been played back with the playback mechanism or recording and playback mechanism at the beginning of forward winding the frequency counter reading of wow & flutter should be 0.25% or less(WRMS).	with in 0.25% JIS(WTD)	Both the playback and recording & playback mechanism

■ Electrical performance

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Adjustment of recording bias current (Reference value)	*Mode : Forward or reverse mode *Recording mode *Test tape :AC-514 and AC-225 Measurement output terminal :Both recording and headphone terminals	1.With the recording and playback mechanism, load the test tapes(AC-514 to TYP Ⅱ and AC-225 to TYP Ⅰ),and set the mechanism to the recording and pausing conditions in advance. 2.After connecting 100Ω in series to the recorder head,measure the bias current with a valve voltmeter at both of the terminals. 3.After resetting the [PAUSE] mode,start recording. At this time,adjust VR101 for LcH and VR201 for RcH so that the recording bias current values become 4.0μA (TYP Ⅰ) and 4.20μA(TYP Ⅱ).	AC-225 :4.20μA AC-514 :4.0μA	LcH :VR101 RcH :VR201
Adjustment of recording and playback frequency characteristics	Reference frequency :1kHz and 10kHz (REF:-20dB) Test tape :TYP Ⅱ AC-514 Measurement input terminal :OSC IN	1.With the recording and playback mechanism,load the test tape(AC-514 to TYP Ⅱ),and set the mechanism to the recording and pausing condition in advance. 2.While repetitively inputting the reference frequency signal of 1kHz and 10kHz from OSC IN, record and playback the test tape. 3.While recording and playing back the test tape in TYP Ⅱ,adjust VR101 for LcH and VR201 for RcH so that the output deviation between 1kHz and 10kHz becomes -1dB±2dB.	Output deviation between 1kHz and 10kH :-1dB±2dB	LcH :VR101 RcH :VR201

■ Reference values for electrical function confirmation items

Items	Measurement conditions	Measurement method	Standard values	Adjusting positions
Recording bias frequency	*Recording and playback side forward or reverse *Test tape :TYP Ⅱ AC-514 *Measurement terminal BIAS TP on P.C.board	1.While changing over to and from BIAS 1 and 2, confirm that the frequency is changed. 2.With the recording and playback mechanism. load the test tape (AC-514 to TYP Ⅱ),and set the mechanism to the recording and pausing conditions in advance. 3.Confirm that the BIAS TP frequency on the P.C.board is 100kHz±6kHz.	100kHz +9kHz -7kHz	
Eraser current (Reference value)	*Recording and playback side forward or reverse *Recording mode *Test tape :AC-514 and AC-225 Measurement terminal Both of the eraser head	1.With the recording and playback mechanism, load the test tapes(AC-514 to TYP Ⅱ and AC-225 to TYP Ⅰ),and set the mechanism to the recording and pausing condition in advance. 2.After setting to the recording conditions,connect 1MΩ in series to the eraser head on the recording and playback mechanism side,and measure the eraser current from both of the eraser terminal.	TYP Ⅱ :120mA TYP Ⅰ :75mA	

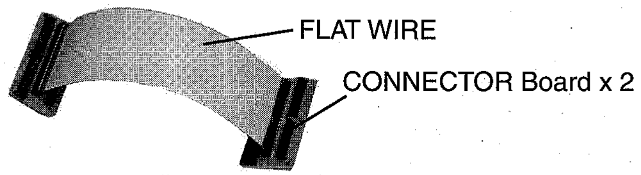
Diagnosis which uses extension wire method

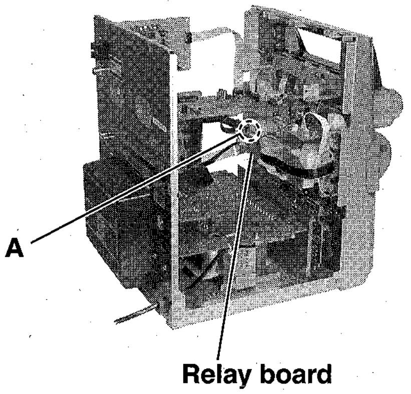
System control P.C.board

1. Remove the metal cover and CD changer mechanism.
2. Remove the front panel assembly.
3. One screw **A** is removed, and relay board is removed.
4. As shown in fig.1, place the front panel assembly after opening it outward using the right side of the front panel as an axis.
5. The extension wire is connected with CN870 & CN871 on the INPUT/OUTPUT board and CN860 & CN861 on the main board.

Extension wire parts No.

QUQ412-4020CJ	FLAT WIRE
JIG-MXJ500	CONNECTOR Board x 2


FLAT WIRE
CONNECTOR Board x 2


A
Relay board

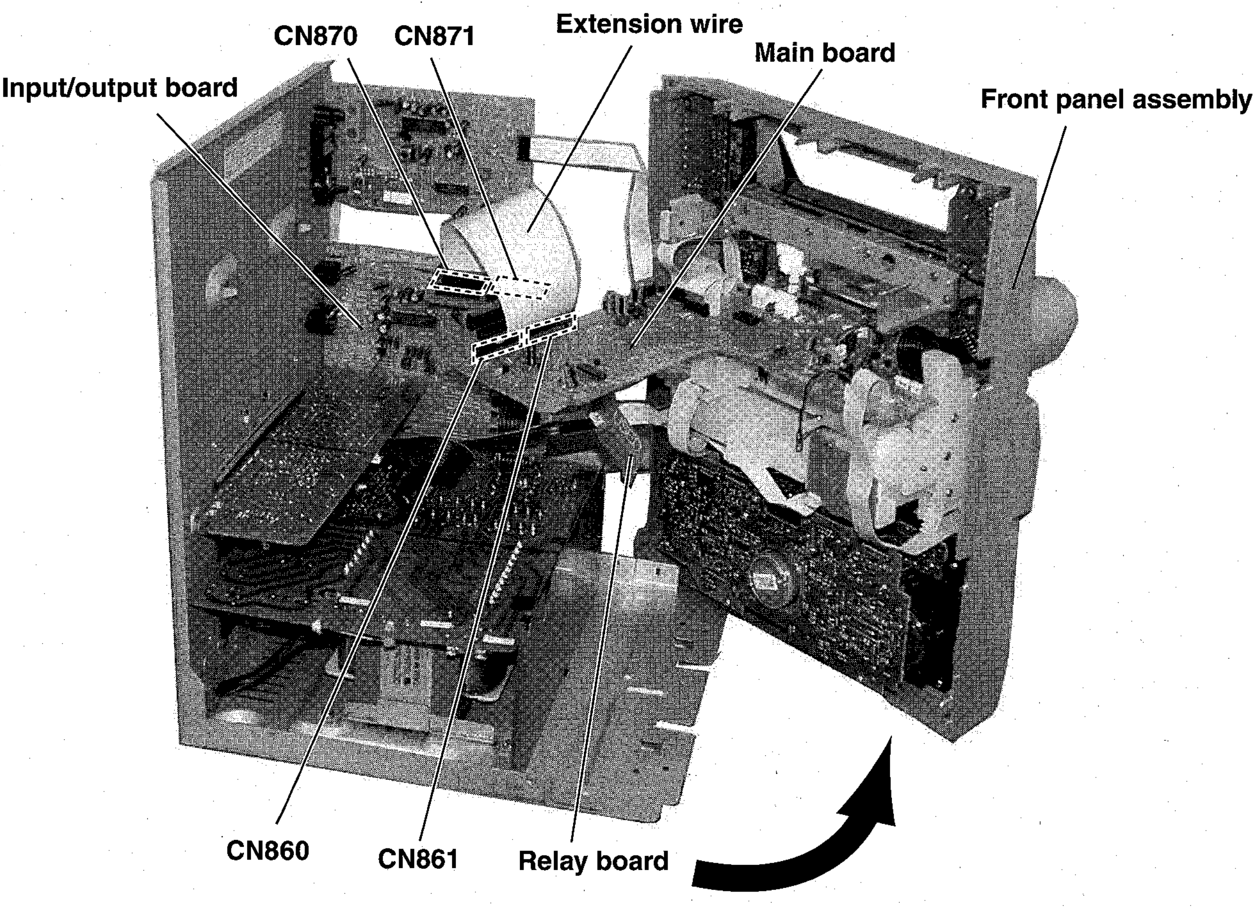

CN870
CN871
Extension wire
Main board
Input/output board
Front panel assembly
CN860
CN861
Relay board

Fig.1

Flow of functional operation until TOC read

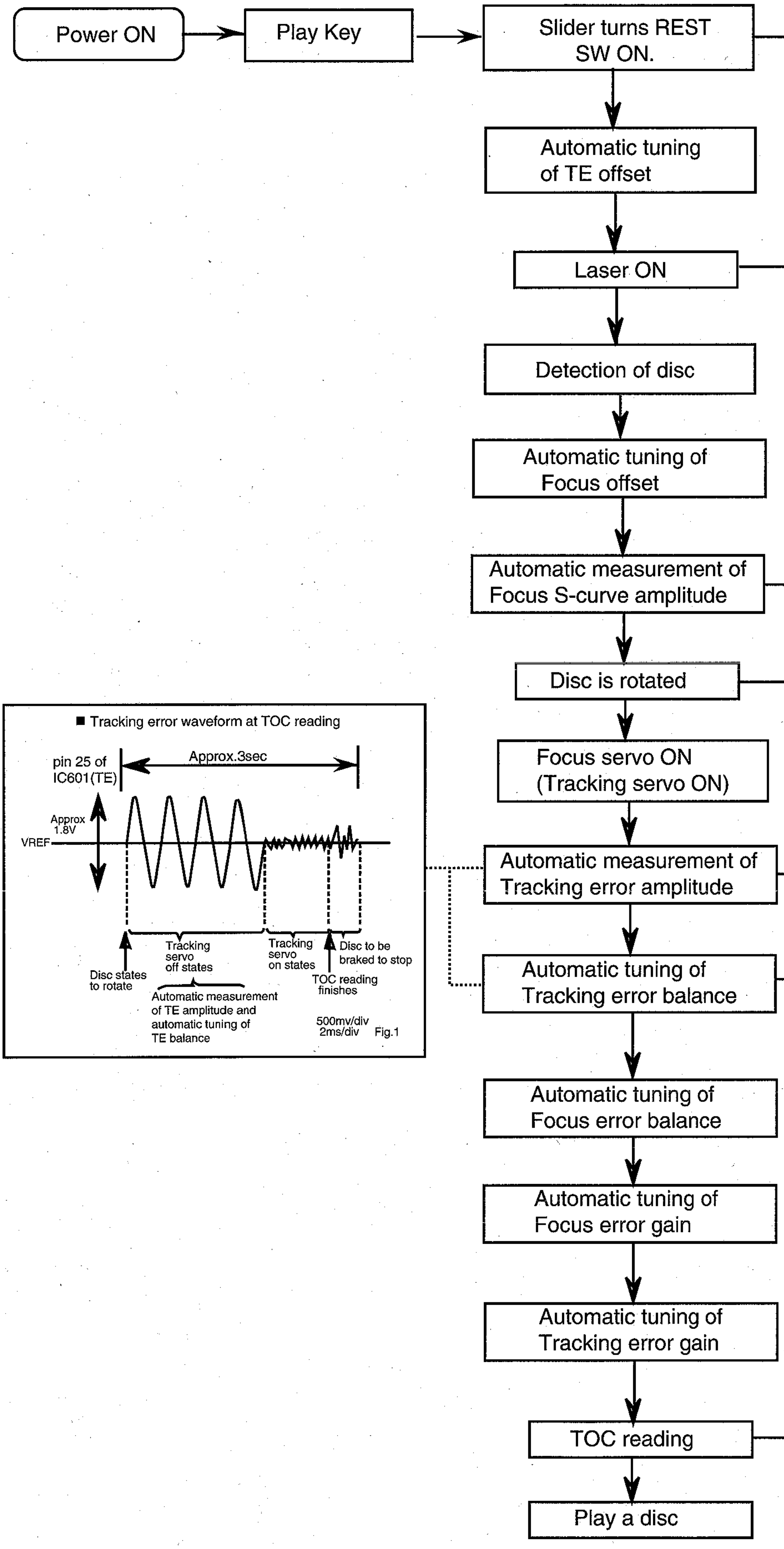

Power ON
Play Key
Slider turns REST SW ON.
Automatic tuning of TE offset
Laser ON
Detection of disc
Automatic tuning of Focus offset
Automatic measurement of Focus S-curve amplitude
Disc is rotated
Focus servo ON (Tracking servo ON)
Automatic measurement of Tracking error amplitude
Automatic tuning of Tracking error balance
Automatic tuning of Focus error balance
Automatic tuning of Focus error gain
Automatic tuning of Tracking error gain
TOC reading
Play a disc
■ Tracking error waveform at TOC reading
pin 25 of IC601(TE)
Approx.3sec
Approx 1.8V
VREF
Disc states to rotate
Tracking servo off states
Automatic measurement of TE amplitude and automatic tuning of TE balance
Tracking servo on states
Disc to be braked to stop
TOC reading finishes
500mv/div
2ms/div

Fig.1

Check Point

Confirm that the voltage at the pin5 of CN801 is "H"\"L"\"H".

Check that the voltage at the pin40 of IC651 is + 5V?

Confirm that the Focus error S-cuve signal at the pin28 of IC651 is approx.2Vp-p

Confirm that the signal from pin24 IC651 is 0V as a accelerated pulse during approx.400ms.

Confirm the waveform of the Tracking error signal. at the pin 25 of IC601 (R604) (See fig-1)

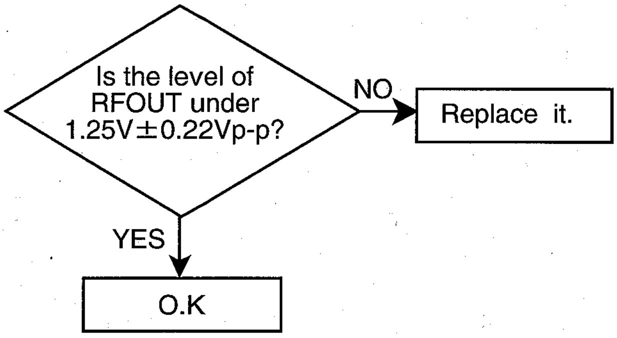
Confirm the eys-pattern at the lead of TP1

Maintenance of laser pickup

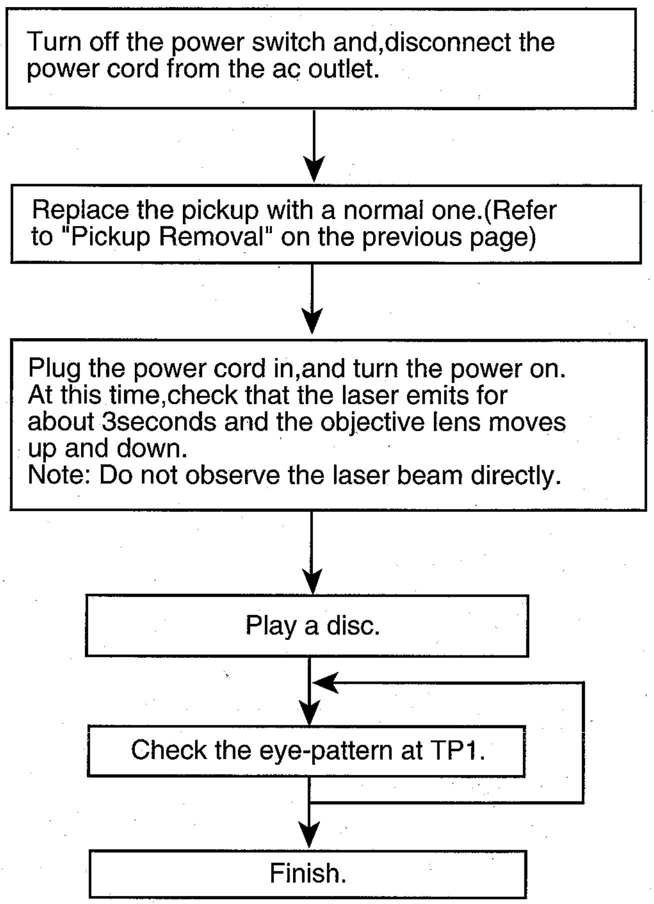
(1) Cleaning the pick up lens
Before you replace the pick up, please try to clean the lens with a alcohol soaked cotton swab.

(2) Life of the laser diode
When the life of the laser diode has expired, the following symptoms will appear.

1. The level of RF output (EFM output:amplitude of eye pattern) will below.


Is the level of RFOUT under 1.25V±0.22Vp-p?
NO
Replace it.
YES
O.K

Replacement of laser pickup


Turn off the power switch and,disconnect the power cord from the ac outlet.
Replace the pickup with a normal one.(Refer to "Pickup Removal" on the previous page)
Plug the power cord in,and turn the power on. At this time,check that the laser emits for about 3seconds and the objective lens moves up and down. Note: Do not observe the laser beam directly.
Play a disc.
Check the eye-pattern at TP1.
Finish.

(3) Semi-fixed resistor on the APC PC board The semi-fixed resistor on the APC printed circuit board which is attached to the pickup is used to adjust the laser power.Since this adjustment should be performed to match the characteristics of the whole optical block, do not touch the semi-fixed resistor.
If the laser power is lower than the specified value,the laser diode is almost worn out, and the laser pickup should be replaced.
If the semi-fixed resistor is adjusted while the pickup is functioning normally,the laser pickup may be damaged due to excessive current.

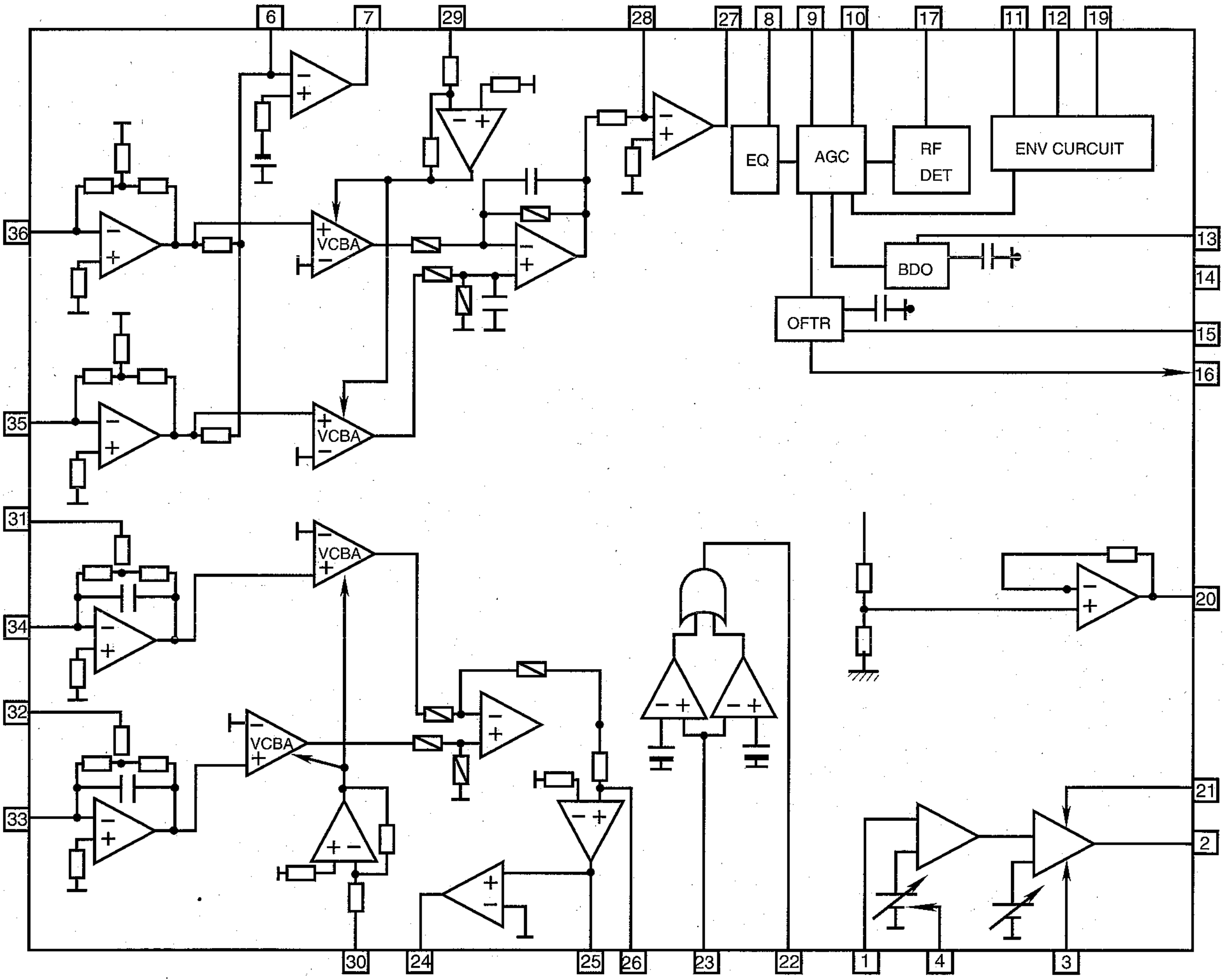
Description of major ICs

■ AN8806SB-W (IC601) : RF&Servo AMP

1.Pin layout

PD	1	36	PDAC
LD	2	35	PDBD
LDON	3	34	PDF
LDP	4	33	PDE
VCC	5	32	PDER
RF-	6	31	PDFR
RF OUT	7	30	TBAL
RF IN	8	29	FBAL
C.AGC	9	28	EF-
ARF	10	27	EF OUT
C.ENV	11	26	TE-
C.EA	12	25	TE OUT
CS BDO	13	24	CROSS
BDO	14	23	TE BPF
CS BRT	15	22	VDET
OFTR	16	21	LD OFF
/NRFDET	17	20	VREF
GND	18	19	ENV

2.Block diagram


6
7
29
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27
8
9
10
17
11
12
19
36
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31
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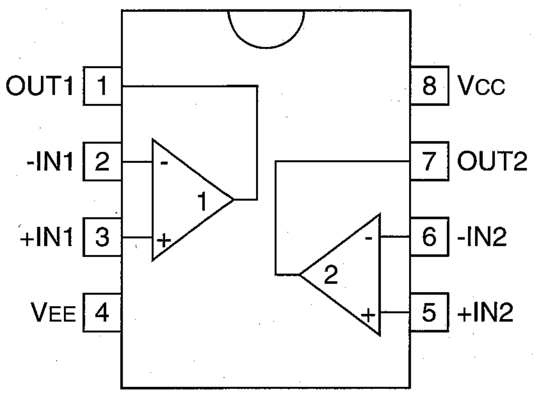
32
33
13
14
15
16
20
21
2
30
24
25
26
23
22
1
4
3
VCBA
VCBA
VCBA
VCBA
EQ
AGC
RF DET
ENV CURCUIT
BDO
OFTR

3. Pin function

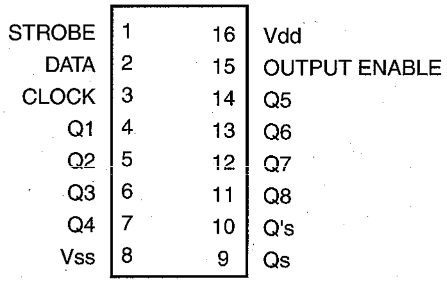
Pin No.	Symbol	I/O	Description
1	PD	I	APC amp input terminal
2	LD	O	APC amp output terminal
3	LD ON	I	APC ON/OFF control terminal
4	LDP	--	Connect to ground
5	VCC	--	Power supply
6	RF-	I	Inverse input pin for RF amp
7	RF OUT	O	RFamp output
8	RF IN	I	RF input
9	C.AGC	I/O	Connecting pin of AGC loop filter
10	ARF	O	RF output
11	C.ENV	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
12	C.EA	I/O	A capacitor is connected to this terminal to detect the envelope of RF signal
13	CS BDO	I/O	A capacitor is connected to detect the lower envelope of RF signal
14	BDO	O	BDO output pin
15	CS BRT	I/O	A capacitor is connected to detect the lower envelope of RF signal
16	OFTR	O	Of-track status signal output
17	/NRFDET	O	RF detection signal output
18	GND	--	Ground
19	ENV	O	Envelope output
20	VREF	O	Reference voltage output
21	LD OFF	--	Connect to ground
22	VDET	O	Vibration detection signal output
23	TE BPF	I	Input pin of tracking error through BPF
24	CROSS	O	Tracking error cross output
25	TE OUT	O	Tracking error signal output
26	TE-	I	Inverse input pin for tracking error amp
27	FE OUT	O	Output pin of focus error
28	FE-	I	Inverse input pin for focus error amp
29	FBAL	I	Focus balance control
30	TBAL	I	Tracking balance control
31	PDFR	I/O	F I-V amp gain control
32	PDER	I/O	E I-V amp gain control
33	PDF	I	I-V amp input
34	PDE	I	I-V amp input
35	PD BD	I	I-V amp input
36	PD AC	I	I-V amp input

■ BA15218(IC481,501,502,526,546,571):OP AMP.

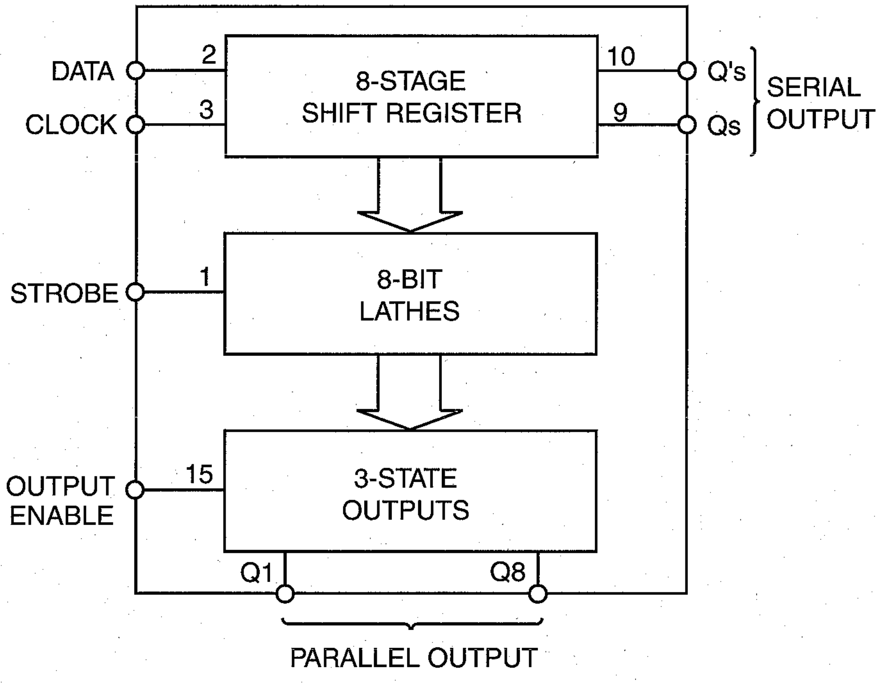

OUT1
1
-IN1
2
+IN1
3
VEE
4
8
Vcc
7
OUT2
6
-IN2
5
+IN2
-
+
1
2
-
+

■ BU4094BCF-X(IC303,IC304):Serial to parallel port extension

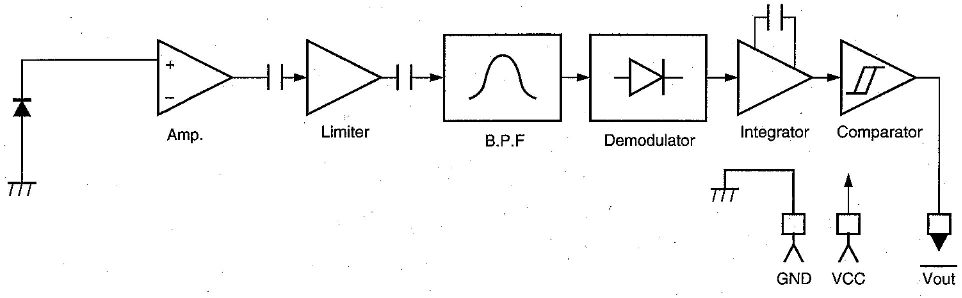
1.Pin layout


STROBE 1
DATA 2
CLOCK 3
Q1 4
Q2 5
Q3 6
Q4 7
Vss 8
16 Vdd
15 OUTPUT ENABLE
14 Q5
13 Q6
12 Q7
11 Q8
10 Q's
9 Qs

2.Block diagram

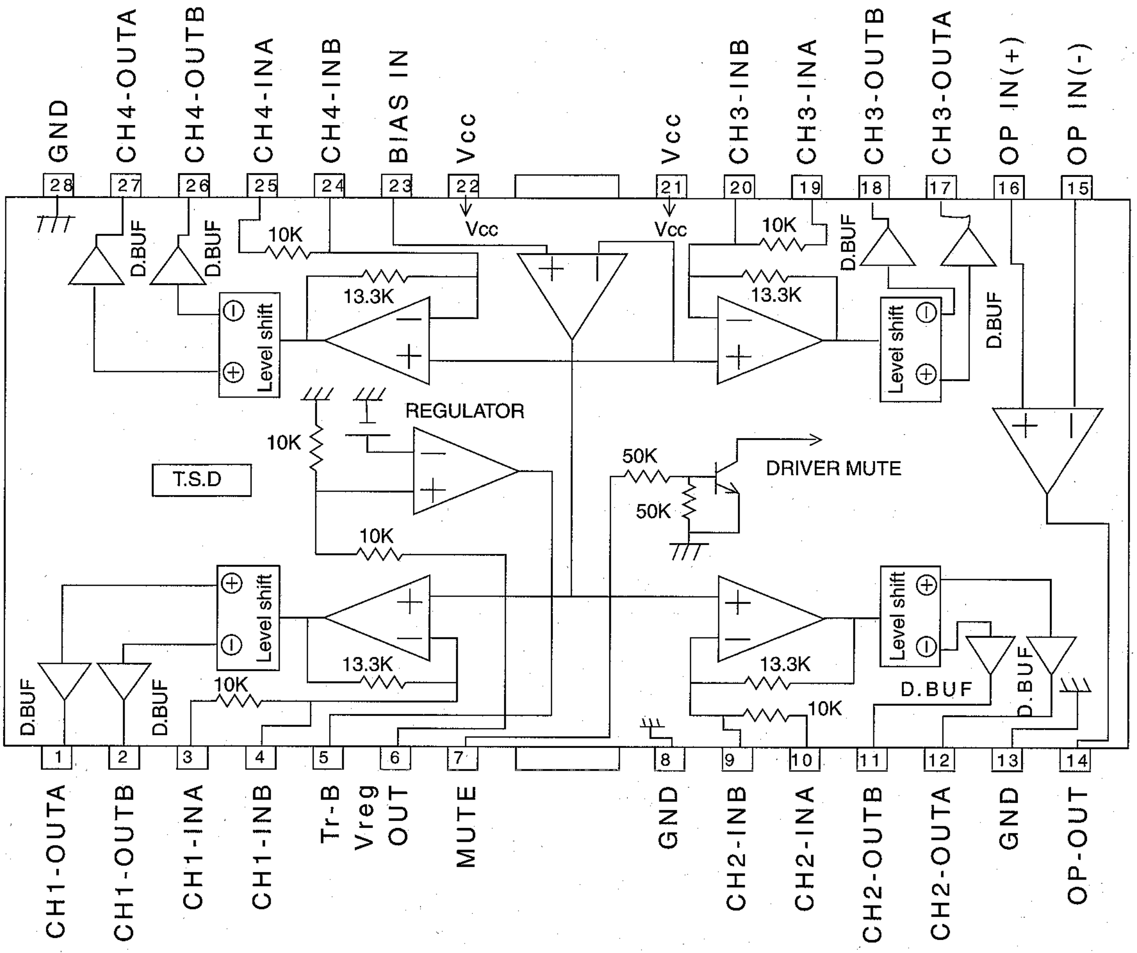

DATA
2
CLOCK
3
8-STAGE
SHIFT REGISTER
10
Q's
9
Qs
SERIAL
OUTPUT
STROBE
1
8-BIT
LATHES
OUTPUT
ENABLE
15
3-STATE
OUTPUTS
Q1
Q8
PARALLEL OUTPUT

■ GP1U281X (IC915) : Receiver for remote controller


+
-
Amp.
Limiter
B.P.F
Demodulator
Integrator
Comparator
GND
VCC
Vout

■ BA6897FP-W(IC801): 4channel driver

1.Pin layout & Block diagram


GND
CH4-OUTA
CH4-OUTB
CH4-INA
CH4-INB
BIAS IN
Vcc
Vcc
CH3-INB
CH3-INA
CH3-OUTB
CH3-OUTA
OP IN(+)
OP IN(-)
28
27
26
25
24
23
22
21
20
19
18
17
16
15
D.BUF
D.BUF
10K
Vcc
Vcc
10K
D.BUF
13.3K
13.3K
Level shift
Level shift
D.BUF
REGULATOR
10K
T.S.D
50K
DRIVER MUTE
50K
10K
Level shift
Level shift
13.3K
13.3K
D.BUF
10K
10K
D.BUF
D.BUF
D.BUF
1
2
3
4
5
6
7
8
9
10
11
12
13
14
CH1-OUTA
CH1-OUTB
CH1-INA
CH1-INB
Tr-B
Vreg OUT
MUTE
GND
CH2-INB
CH2-INA
CH2-OUTB
CH2-OUTA
GND
OP-OUT

T.S.D;Thermal shutdown

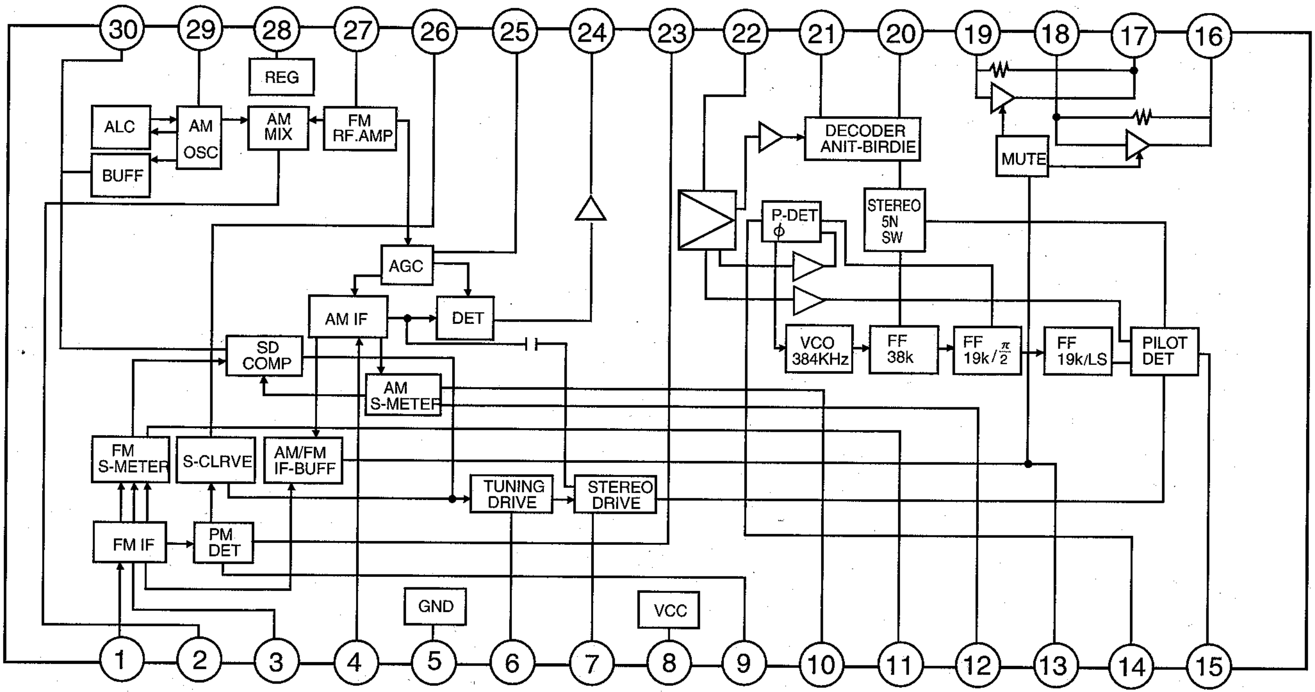
D.BUF:Drive buffer

2.Pin function

Pin NO.	Symbol	Function	Pin NO.	Symbol	Function
1	CH1-OUTA	Driver CH1 - output	15	OP IN(-)	Operation amplifier - input
2	CH1-OUTB	Driver CH1 + output	16	OP IN(+)	Operation amplifier + output
3	CH1-INA	Driver CH1 input	17	CH3-OUTA	Driver CH3 - output
4	CH1-INB	Driver CH1 gain adjustment Input terminal	18	CH3-OUTB	Driver CH3 + output
5	Tr-B	Connect to the base of external Tr	19	CH3-INA	Driver CH3 input
6	Vreg OUT	Fixed voltage output	20	CH3-INB	Driver CH3 gain adjustment Input terminal
7	MUTE	Mute control terminal	21	Vcc	Power supply terminal
8	GND	GND	22	Vcc	Power supply terminal
9	CH2-INB	Driver CH2 gain adjustment Input terminal	23	BAIS IN	Bias amplifier input terminal
10	CH2-INA	Driver CH2 input	24	CH4-INB	Driver CH4 gain adjustment Input terminal
11	CH2-OUTB	Driver CH2 + output	25	CH4-INA	Driver CH4 input
12	CH2-OUTA	Driver CH2 - output	26	CH4-OUTB	Driver CH4 + output
13	GND	Sub-slate GND	27	CH4-OUTA	Driver CH4 - output
14	OPOUT	Operation amplifier output	28	GND	Sub-slate GND

■ LA1838(IC1): FM AM IF AMP&detector, FM MPX decoder

1. Block Diagram

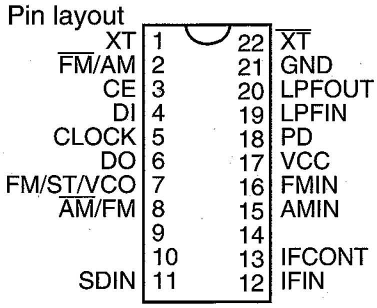

30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
REG
ALC
AM OSC
AM MIX
FM RF.AMP
BUFF
DECODER ANIT-BIRDIE
MUTE
STEREO 5N SW
P-DET ϕ
AGC
AM IF
DET
SD COMP
AM S-METER
VCO 384KHz
FF 38k
FF 19k/π/2
FF 19k/LS
PILOT DET
FM S-METER
S-CLRVE
AM/FM IF-BUFF
TUNING DRIVE
STEREO DRIVE
FM IF
PM DET
GND
VCC
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

2. Pin Function

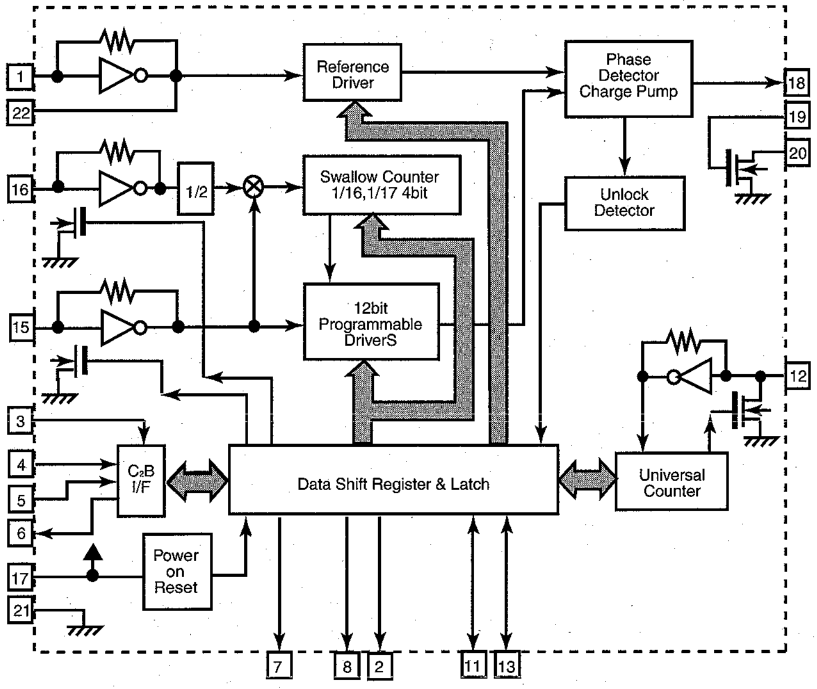
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	FM IN	I	This is an input terminal of FM IF signal.	16	L OUT	O	Left channel signal output.
2	AM MIX	O	This is an out put terminal for AM mixer.	17	R OUT	O	Right channel signal output.
3	FM IF	I	Bypass of FM IF	18	L IN	I	Input terminal of the left channel post AMP.
4	AM IF	I	Input of AM IF Signal.	19	R IN	I	Input terminal of the right channel post AMP.
5	GND	–	This is the device ground terminal.	20	RO	O	Mpx Right channel signal output.
6	TUNED	O	When the set is tuning, this terminal becomes "L".	21	LO	O	Mpx Left channel signal output.
7	STEREO	O	Stereo indicator output. Stereo "L", Mono: "H"	22	IF IN	I	Mpx input terminal
8	VCC	–	This is the power supply terminal.	23	FM OUT	O	FM detection output.
9	FM DET	–	FM detect transformer.	24	AM DET	O	AM detection output.
10	AM SD	–	This is a terminal of AM ceramic filter.	25	AM AGC	I	This is an AGC voltage input terminal for AM
11	FM VSM	O	Adjust FM SD sensitivity.	26	AFC	–	This is an output terminal of voltage for FM-AFC.
12	AM VSM	O	Adjust AM SD sensitivity.	27	AM RF	I	AM RF signal input.
13	MUTE	I/O	When the signal of IF REQ of IC121(LC72131) appear, the signal of FM/AM IF output. //Muting control input.	28	REG	O	Register value between pin 26 and pin28 desides the frequency width of the input signal.
14	FM/AM	I	Change over the FM/AM input. "H" :FM, "L" : AM	29	AM OSC	–	This is a terminal of AM Local oscillation circuit.
15	MONO/ST	O	Stereo : "H", Mono: "L"	30	OSC BUFFER	O	AM Local oscillation Signal output.

■LC72136N (IC2) : PLL Frequency synthesizer

1. Pin layout


XT 1
$\overline{FM}$/AM 2
CE 3
DI 4
CLOCK 5
DO 6
FM/ST/VCO 7
$\overline{AM}$/FM 8
9
10
SDIN 11
22 $\overline{XT}$
21 GND
20 LPFOUT
19 LPFIN
18 PD
17 VCC
16 FMIN
15 AMIN
14
13 IFCONT
12 IFIN

2. Block

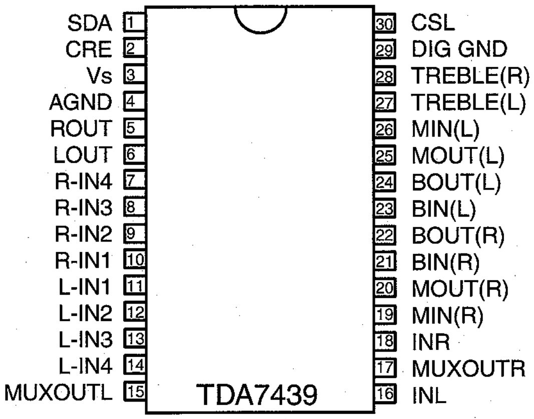

Reference Driver
Phase Detector Charge Pump
Swallow Counter 1/16,1/17 4bit
1/2
Unlock Detector
12bit Programmable DriverS
C2B I/F
Data Shift Register & Latch
Universal Counter
Power on Reset
1
22
16
15
3
4
5
6
17
21
18
19
20
12
7
8
2
11
13

3. Function

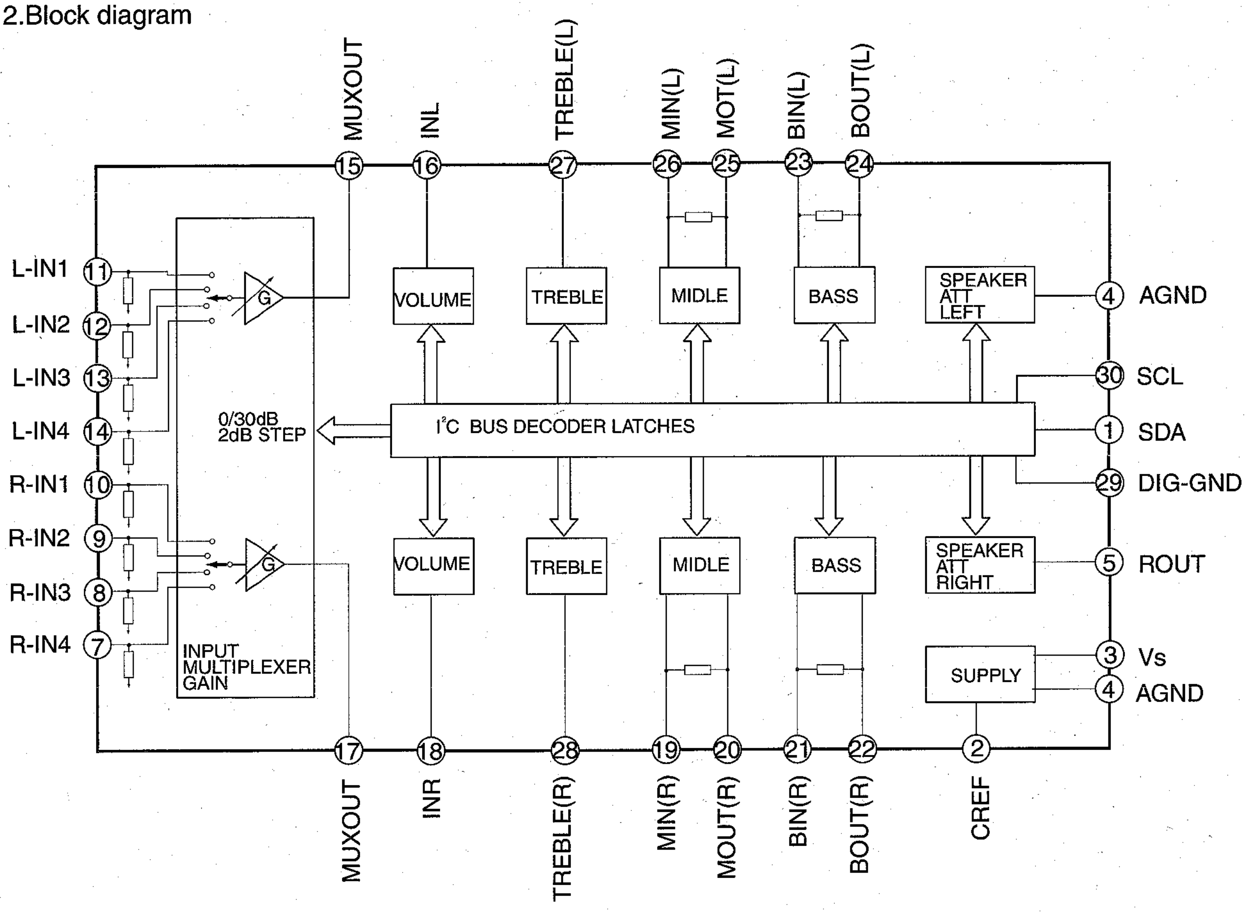
Pin No.	Symbol	I/O	Function	Pin No.	Symbol	I/O	Function
1	XT	I	X'tal oscillator connect (75kHz)	12	IFIN	I	IF counter signal input
2	$\overline{FM}$/AM	O	LOW:FM mode	13	IFCONT	O	IF signal output
3	CE	I	When data output/input for 4pin(input) and 6pin(output): H	14		-	Not use
4	DI	I	Input for receive the serial data from controller	15	AMIN	I	AM Local OSC signal output
5	CLOCK	I	Sync signal input use	16	FMIN	I	FM Local OSC signal input
6	DO	O	Data output for Controller Output port	17	VCC	-	Power suplly(VDD=4.5-5.5V) When power ON:Reset circuit move
7	FM/ST/VCO	O	"Low": MW mode	18	PD	O	PLL charge pump output(H: Local OSC frequency Height than Reference frequency. L: Low Agreement: Height impedance)
8	$\overline{AM}$/FM	O	Open state after the power on reset	19	LPFIN	I	Input for active lowpassfilter of PLL
9	LW	I/O	Input/output port	20	LPFOUT	O	Output for active lowpassfilter of PLL
10	MW	I/O	Input/output port	21	GND	-	Connected to GND
11	SDIN	I/O	Data input/output	22	$\overline{XT}$	I	X'tal oscillator(75KHz)

■ TDA7439 (IC436) : Control volume

1.Pin layout


SDA 1
CRE 2
Vs 3
AGND 4
ROUT 5
LOUT 6
R-IN4 7
R-IN3 8
R-IN2 9
R-IN1 10
L-IN1 11
L-IN2 12
L-IN3 13
L-IN4 14
MUXOUTL 15
TDA7439
30 CSL
29 DIG GND
28 TREBLE(R)
27 TREBLE(L)
26 MIN(L)
25 MOUT(L)
24 BOUT(L)
23 BIN(L)
22 BOUT(R)
21 BIN(R)
20 MOUT(R)
19 MIN(R)
18 INR
17 MUXOUTR
16 INL

2.Block diagram


MUXOUT 15
INL 16
TREBLE(L) 27
MIN(L) 26
MOT(L) 25
BIN(L) 23
BOUT(L) 24
L-IN1 11
L-IN2 12
L-IN3 13
L-IN4 14
R-IN1 10
R-IN2 9
R-IN3 8
R-IN4 7
G
0/30dB
2dB STEP
INPUT
MULTIPLEXER
GAIN
VOLUME
TREBLE
MIDLE
BASS
SPEAKER ATT LEFT
I²C BUS DECODER LATCHES
SPEAKER ATT RIGHT
SUPPLY
4 AGND
30 SCL
1 SDA
29 DIG-GND
5 ROUT
3 Vs
4 AGND
17 MUXOUT
18 INR
28 TREBLE(R)
19 MIN(R)
20 MOUT(R)
21 BIN(R)
22 BOUT(R)
2 CREF

■ MN101CP35DEA(IC810):System controller

Pin function (1/2)

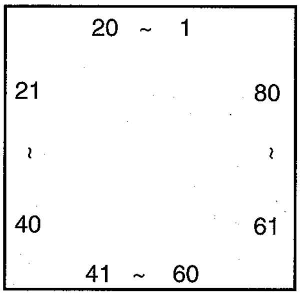
Pin No.	Symbol	I/O	Function
1	KCMND	O	SVC3 Serial data output
2	MSTAT	I	SVC3 status input input
3	KCLK	I	SVC3 Serial clock input
4	DATAOUT	O	SLC/TUNER data output
5	DATAIN	I	TUNER data input
6	CK	O	SLC/TUNER clock
7	BEAT	O	Beat cut signal output of TUNER
8	VDD	-	Power supply +5V
9,10	OSC2,1	I/O	Oscillation terminal (8MHz)
11	VSS	-	Connect to GND
12,13	XI,XO	I/O	Sub clock (32.768kHz)
14	MMOD	-	Connect to GND
15	VREF-	-	Connect to GND
16~19	KEY1~4	I	Key matrix input 1~4
20	SLCKEY1	I	Tape B playback/recording detect switch
21	SLCKEY2	I	Tape B playback detect switch
22	SLCKEY3	I	Tape A playback detect switch
23	SPI	I	SPI IN
24	VREF+	I	
25	MRDY	I	VC3 Ready
26	RESET	I	Reset signal input
27	P OPEN	I	Rolling panel open detection signal input
28	P CLOSE	I	Rolling panel close detection signal input
29	VOLLED	O	LED Control signal output (VOL)
30	MSI	I	MS detector signal input
31	ECHO2	-	Echo ON/OFF(Not used)
32	ECHO1	-	Echo ON/OFF(Not used)
33	REMIN	I	Remote control signal input
34	PHOTOA	I	Tape A mechanism running detection signal input
35	PHOTOB	I	Tape B mechanism running detection signal input
36	INH	I	Inhibit signal input
37	RDSCLK	I	Clock signal input from IC3 (B/E/EN model)
38	PRT	I	Protector input
39	EXTCE		EXT IC Chip enable
40~41	BASSVOL+/-	I	Bass volume rotary encoder input(+/-)
42	RDS-DATA	I	RDS data input from IC3(B/E/EN model)
43	SPIA		SPI Control A
44	SPIB		SPI Control B
45,46	VOL+/-	I	Volume rotary encoder input (+/-)
47	MPX	I	Stereo detect
48	FVOLDA	O	Front volume data output
49	VOLCLK	O	Clock sibnal output to IC436
50	BASSLED	O	LED Control signal output (BASS)

Pin function (2/2)

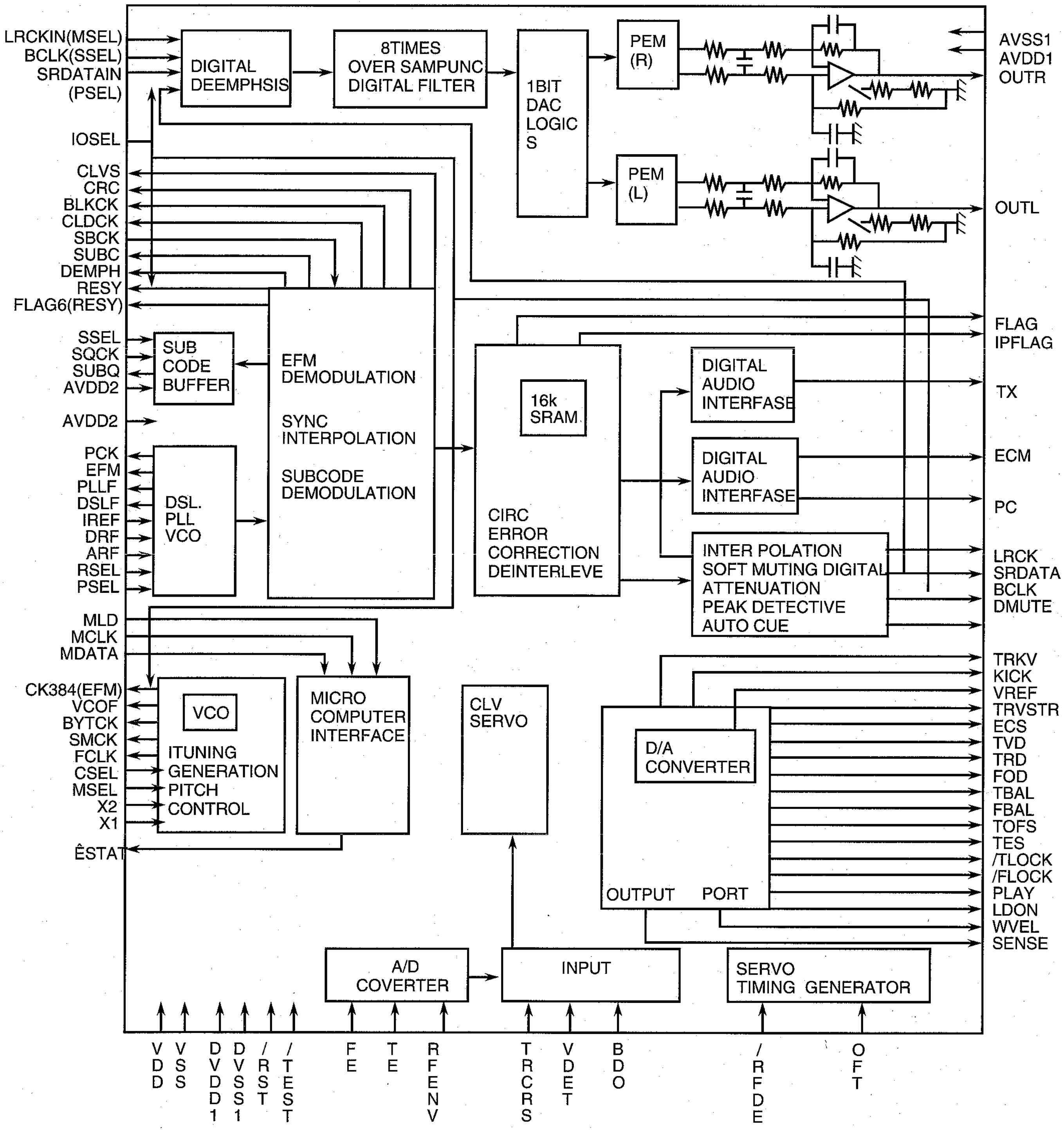
Pin No.	Symbol	I/O	Function
51~63	G13~G1	O	FL grid control signal output
64~87	P1~P24	O	FL segment control signal output
88	SLCCE	O	SLC Chip enable signal output to IC303,IC304
89	AUX LED	O	LED Control signal output (AUX)
90	DOORCL	O	Rolling panel motor control signal output
91	DOOR OPEN	O	Rolling panel motor control signal output
92	CDLED	O	LED Control signal output (CD)
93	TAPE LED	O	LED Control signal output (TAPE)
94	TU LED	O	LED Control signal output (TUNER)
95	SMUTE	O	System mute control signal output
96	BTU+	O	Tuner supply control
97	POUT	O	Power ON/OFF
98	TUCE	O	TUNER Chip enable signal output
99	VC3RESET	O	VC3 reset output
100	VPP	-	Power supply

■ MN35510 (IC651) : DIGITAL SERVO&DIGITAL SIGNAL PROCESSER

1. Terminal Layout


20 ~ 1
21
80
40
61
41 ~ 60

2.Block Diagram

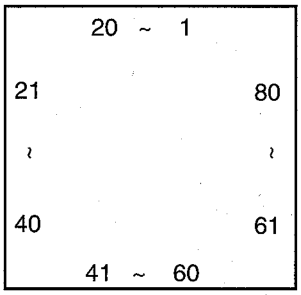

LRCKIN(MSEL)
BCLK(SSEL)
SRDATAIN
(PSEL)
IOSEL
CLVS
CRC
BLKCK
CLDCK
SBCK
SUBC
DEMPH
RESY
FLAG6(RESY)
SSEL
SQCK
SUBQ
AVDD2
AVDD2
PCK
EFM
PLLF
DSLF
IREF
DRF
ARF
RSEL
PSEL
MLD
MCLK
MDATA
CK384(EFM)
VCOF
BYTCK
SMCK
FCLK
CSEL
MSEL
X2
X1
ÊSTAT
DIGITAL DEEMPHSIS
8TIMES OVER SAMPUNC DIGITAL FILTER
1BIT DAC LOGIC S
PEM (R)
PEM (L)
AVSS1
AVDD1
OUTR
OUTL
SUB CODE BUFFER
EFM DEMODULATION
SYNC INTERPOLATION
SUBCODE DEMODULATION
DSL. PLL VCO
16k SRAM
CIRC ERROR CORRECTION DEINTERLEVE
DIGITAL AUDIO INTERFASE
DIGITAL AUDIO INTERFASE
INTER POLATION SOFT MUTING DIGITAL ATTENUATION PEAK DETECTIVE AUTO CUE
FLAG
IPFLAG
TX
ECM
PC
LRCK
SRDATA
BCLK
DMUTE
VCO
ITUNING GENERATION PITCH CONTROL
MICRO COMPUTER INTERFACE
CLV SERVO
D/A CONVERTER
OUTPUT PORT
TRKV
KICK
VREF
TRVSTR
ECS
TVD
TRD
FOD
TBAL
FBAL
TOFS
TES
/TLOCK
/FLOCK
PLAY
LDON
WVEL
SENSE
A/D COVERTER
INPUT
SERVO TIMING GENERATOR
VDD
VSS
DVDD1
DVSS1
/RST
/TEST
FE
TE
RFENV
TRCRS
VDET
BDO
/RFDE
OFT

3. Description

Pin No.	symbol	I/O	Description	Pin No.	symbol	I/O	Description
1	BCLK	O	Not used	41	TES	O	Tracking error shunt signal output(H:shunt)
2	LRCK	O	Not used	42	PLAY	–	Not used
3	SRDATA	O	Not used	43	WVEL	–	Not used
4	DVDD1	–	Power supply (Digital)	44	ARF	I	RF signal input
5	DVSS1	–	Connected to GND	45	IREF	I	Reference current input pin
6	TX	O	Digital audio interface output	46	DRF	I	Bias pin for DSL
7	MCLK	I	μ com command clock signal input (Data is latched at signal's rising point)	47	DSLF	I/O	Loop filter pin for DSL
8	MDATA	I	μ com command data input	48	PLLF	I/O	Loop filter pin for PLL
9	MLD	I	μ com command load signal input	49	VCOF	–	Not used
10	SENSE	O	Not used	50	AVDD2	–	Power supply(Analog)
11	FLOCK	O	Not used	51	AVSS2	–	Connected to GND(Analog)
12	TLOCK	O	Not used	52	EFM	–	Not used
13	BLKCK	O	sub-code·block·clock signal output	53	PCK	–	Not used
14	SQCK	I	Outside clock for sub-code Q resister input	54	PDO	–	Not used
15	SUBQ	O	Sub-code Q -code output	55	SUBC	–	Not used
16	DMUTE	–	Connected to GND	56	SBCK	–	Not used
17	STATUS	O	Status signal (CRC,CUE,CLVS,TTSTOP,ECLV,SQOK)	57	VSS	–	Connected to GND(for X'tal oscillation circuit)
18	RST	I	Reset signal input (L:Reset)	58	XI	I	Input of 16.9344MHz X'tal oscillation circuit
19	SMCK	–	Not used	59	X2	O	Output of X'tal oscillation circuit
20	PMCK	–	Not used	60	VDD	–	Power supply(for X'tal oscillation circuit)
21	TRV	O	Traverse enforced output	61	BYTCK	–	Not used
22	TVD	O	Traverse drive output	62	CLDCK	–	Not used
23	PC	–	Not used	63	FCLK	–	Not used
24	ECM	O	Spindle motor drive signal (Enforced mode output) 3-State	64	IPPLAG	–	Not used
25	ECS	O	Spindle motor drive signal (Servo error signal output)	65	FLAG	–	Not used
26	KICK	O	Kick pulse output	66	CLVS	–	Not used
27	TRD	O	Tracking drive output	67	CRC	–	Not used
28	FOD	O	Focus drive output	68	DEMPH		Not used
29	VREF	I	Reference voltage input pin for D/A output block (TVD,FOD,FBA,TBAL)	69	RESY	–	Not used
30	FBAL	O	Focus Balance adjust signal output	70	IOSEL	–	pull up
31	TBAL	O	Tracking Balance adjust signal output	71	TEST	–	pull up
32	FE	I	Focus error signal input(Analog input)	72	AVDD1	–	Power supply(Digital)
33	TE	I	Tracking error signal input(Analog input)	73	OUT L	O	Lch audio output
34	RF ENV	I	RF envelope signal input(Analog input)	74	AVSS1	–	Connected to GND
35	VDET	I	Vibration detect signal input(H:detect)	75	OUT R	O	Rch audio output
36	OFT	I	Off track signal input(H:off track)	76	RSEL	–	pull up
37	TRCRS	I	Track cross signal input	77	CSEL	–	Connected to GND
38	RFDET	I	RF detect signal input(L:detect)	78	PSEL	–	Connected to GND
39	BDO	I	BDO input pin(L:detect)	79	MSEL	–	Connected to GND
40	LDON	O	Laser ON signal output(H:on)	80	SSEL	–	Pull up

■ UPD78055GCA37 (IC251):CD Changer control

1. Terminal Layout

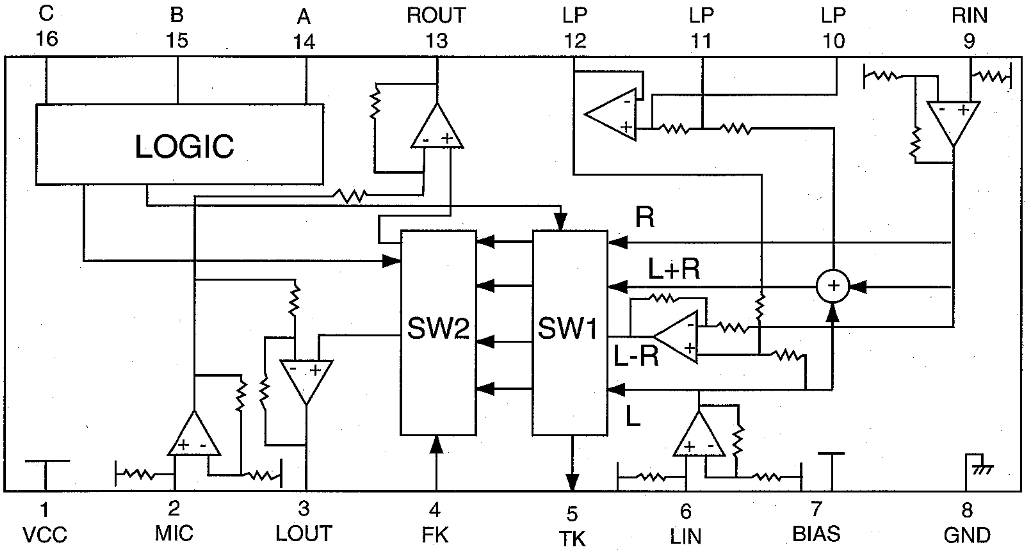


2. Pin function

Pin No.	symbol	I/O	Description	Pin No.	Symbol	I/O	Description
1	DEMPH	I	Deemphasis input	41	LM DOWN	O	L CAM down
2	DEMPHO	O	Deemphasis output	42	RM UP	O	R CAM up
3	OS OFF	I	On screen display on/off	43	RMDOWN	O	R CAM down
4	AVSS	-	Connected to GND	44	CHECK	I	Not used
5	MCS	I	Mode control select	45	CHECK1	I	Not used
6	MRDY	I	SUB Ready	46	CHECK2	I	Not used
7	AVREF1	-	AV reference	47	CHECK3	I	Not used
8	KCMND		SVC3 Serial data out put	48~59			connected to GND
9	MSTAT	O	SVC3 Status input input	60	RESET	I	VC3 reset out
10	KCLK	I	SVC3 Serial clock input	61	STAT	I	Statues signal
11	SUB	I	Sub-code Q code output	62	HREG	O	Not used
12	RST	O	Reset signal input (L : Reset)	63	HRDY	I	Not used
13	SQCK	I	Outside clock for sub-code Q resister input	64	DRMUTE	O	BTL Driver mute
14	DMUTE	I	Digital mute	65	MCLK	I	μ com command clock signal input
15	MREQ	O	Not used	66	MDATA	I	μ com command data input
16	VCDEMP	-	Not used	67	MLD	I	μ com command lode signal input
17	SRDATA	-	Not used	68	VDD	-	Power supply (for X' tal Q oscillation circuit)
18	SRCLK	-	Not used	69	X2	O	Out of X' tal oscillation circuit
19~26	CAM0~7	I	CAM SW input	70	X1	I	Input of 16.9344MHz X' tal oscillation circuit
27~29	1~3SSW	I	Sub tray SW input	71	IC	-	connected to GND
30~32	3~1MSW	I	Sub tray SW output	72	XT2	-	Not used
33	VSS	-	Connected to GND	73	REST	I	Rest SW input
34	DISC	I	Disk sensor	74	AVDD	-	A/D converter power supply
35	SHIFT	I	Test mode(Not used)	75	AVREF	-	Digital GND
36	MNT	I	Test mode(Not used)	76	SSEL	-	Not used
37	MNT1	I	Test mode(Not used)	77	MSEL	-	Not used
38	MNT2	I	Test mode(Not used)	78	PSEL	-	Not used
39	VCORST	-	Not used	79	IOSEL	O	Data select out
40	LMUP	O	L CAM up	80	P ON	O	Power ON/OFF

■ BA3837(IC466):MIC Mixer

1.Block diagram

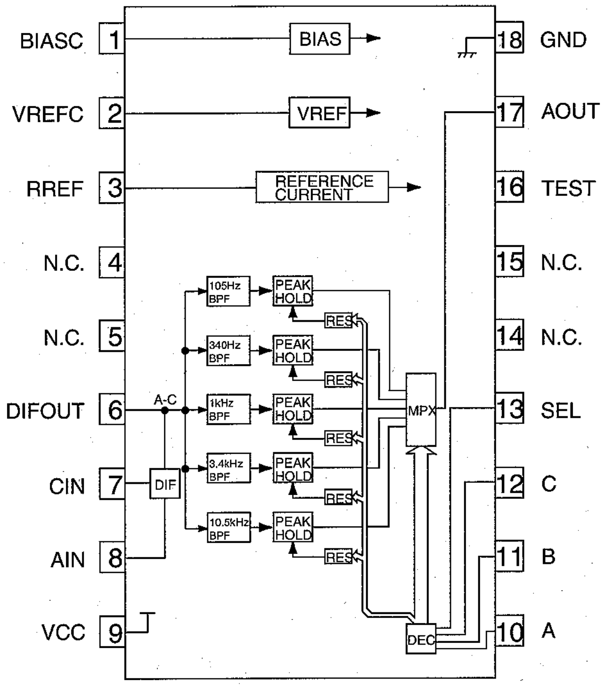

C
16
B
15
A
14
ROUT
13
LP
12
LP
11
LP
10
RIN
9
LOGIC
R
L+R
SW2
SW1
L-R
L
1
VCC
2
MIC
3
LOUT
4
FK
5
TK
6
LIN
7
BIAS
8
GND

2.Pin function

Pin No.	Symbol	I/O	Description
1	VCC	-	Power supply
2	MIC IN	I	Microphone mixing input
3	LOUT	O	Channel L output
4	FK	-	Non connect
5	TK	-	Non connect
6	LIN	I	Channel L input
7	BIAS	I	Signal bias
8	GND	-	Connect to GND
9	RIN	I	Channel R input
10	LPF1	O	Connects to LPF time constant element
11	LPF2	O	Connects to LPF time constant element
12	LPF3	O	LPF outpout
13	ROUT	O	Channel R output
14	CONTA	I	Mode select input A
15	CONTB	I	Mode select input B
16	CONTC	I	Mode select input C

■ BA3835S (IC812) : SPI B.P.F.

1.Block Diagrams


BIASC 1
BIAS
18 GND
VREFC 2
VREF
17 AOUT
RREF 3
REFERENCE CURRENT
16 TEST
N.C. 4
15 N.C.
N.C. 5
14 N.C.
DIFOUT 6
A-C
13 SEL
CIN 7
DIF
12 C
AIN 8
11 B
VCC 9
10 A
105Hz BPF
340Hz BPF
1kHz BPF
3.4kHz BPF
10.5kHz BPF
PEAK HOLD
RES
MPX
DEC

2.Pin Function

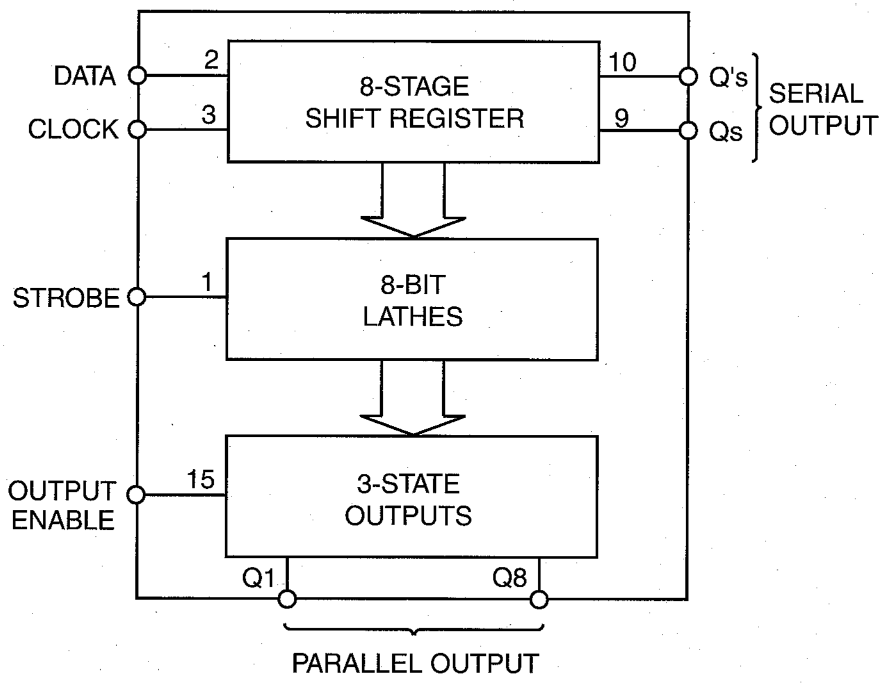
No.	Symbol	I/O	Function
1	BIASC	-	Decoupling condenser connection terminal.
2	VREFC	-	Decoupling condenser connection terminal.
3	RPEF	-	Reference resistance connection terminal.
4	NC	-	Non connect.
5	NC	-	Non connect.
6	NC	-	Non connect.
7	CIN	-	Connected to GND of audio system through a condenser.
8	AIN	I	Inputs the audio signal through a condenser.
9	VCC	-	Power supply terminal.
10	SPI-A	O	Output selection control terminal.
11	SPI-B	O	Output selection control terminal.
12	SPI-C	O	Output selection control terminal.
13	SPICSB	O	Output selection control terminal.
14	NC	-	Non connect.
15	NC	-	Non connect.
16	TEST	-	Connected to GND upon normal use.
17	AOUT	O	Multi-plexor output terminal.
18	GND	-	Connect to GND.

■ BU4094BC(IC811):Serial to parallel port extension

1.Pin layout

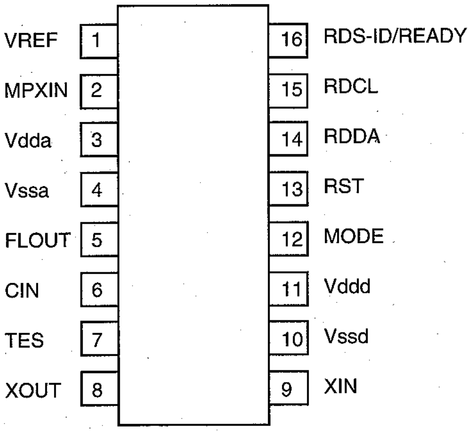
STROBE	1	16	Vdd
DATA	2	15	OUTPUT ENABLE
CLOCK	3	14	Q5
Q1	4	13	Q6
Q2	5	12	Q7
Q3	6	11	Q8
Q4	7	10	Q's
Vss	8	9	Qs

2.Block diagram

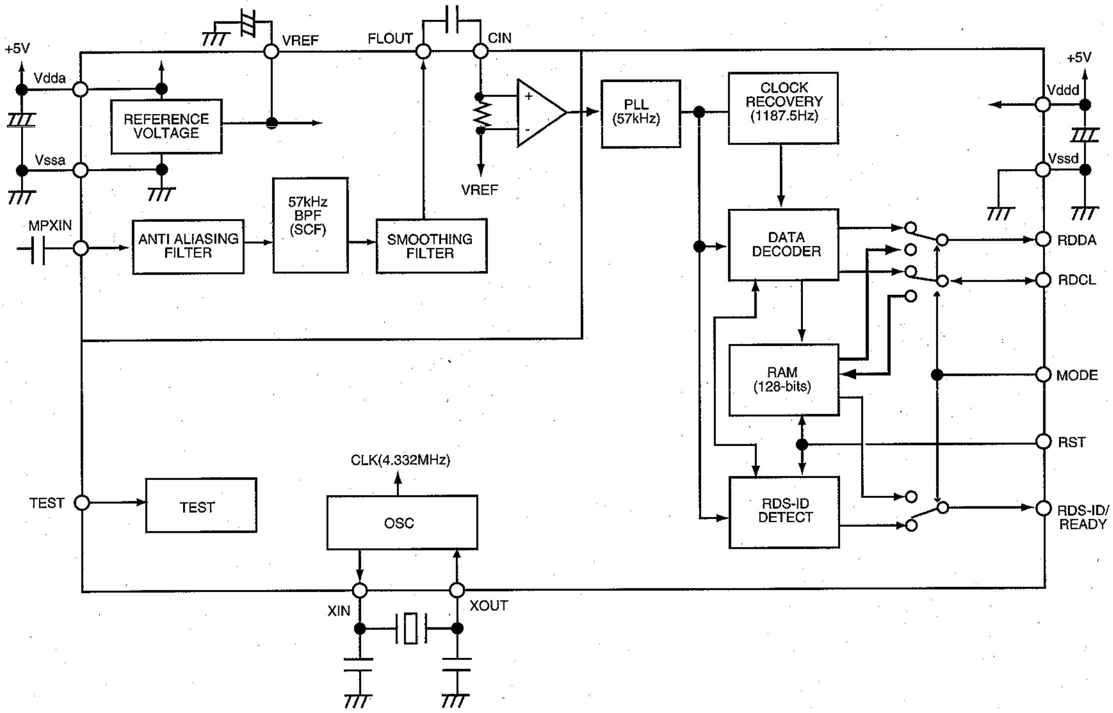

DATA
2
CLOCK
3
8-STAGE
SHIFT REGISTER
10
9
Q's
Qs
SERIAL
OUTPUT
STROBE
1
8-BIT
LATHES
OUTPUT
ENABLE
15
3-STATE
OUTPUTS
Q1
Q8
PARALLEL OUTPUT

■ LA72723(IC3): RDS demodulation

1. Pin layout

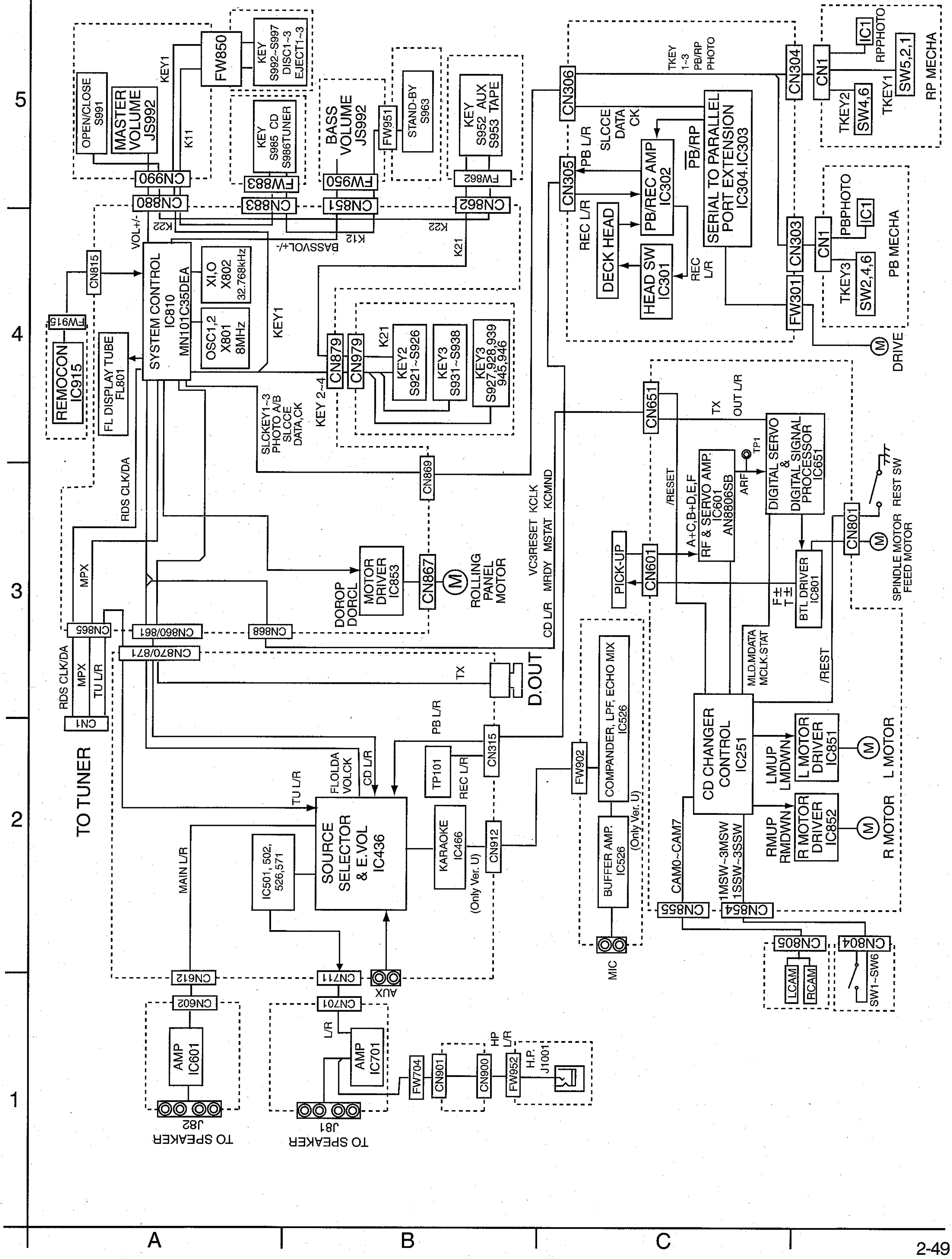

VREF 1
MPXIN 2
Vdda 3
Vssa 4
FLOUT 5
CIN 6
TES 7
XOUT 8
16 RDS-ID/READY
15 RDCL
14 RDDA
13 RST
12 MODE
11 Vddd
10 Vssd
9 XIN

2. Block Diagram

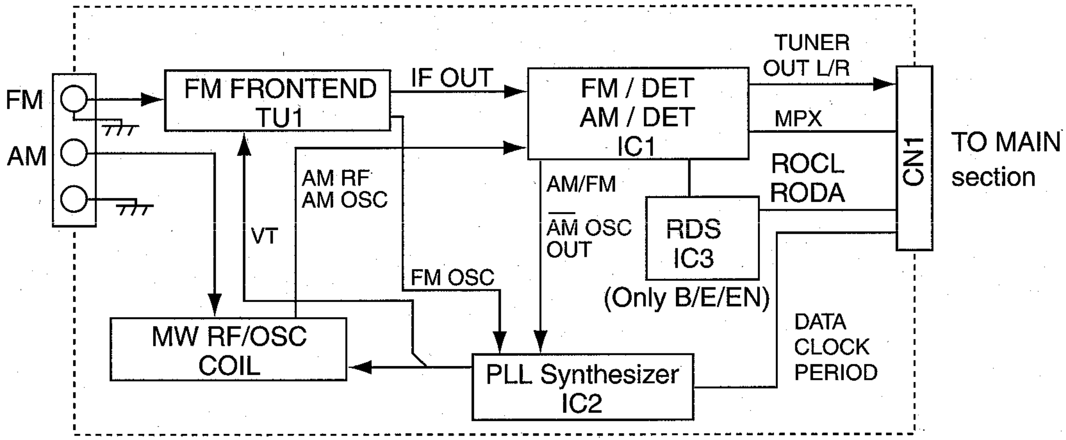

+5V
Vdda
Vssa
VREF
FLOUT
CIN
REFERENCE VOLTAGE
MPXIN
ANTI ALIASING FILTER
57kHz BPF (SCF)
SMOOTHING FILTER
VREF
PLL (57kHz)
CLOCK RECOVERY (1187.5Hz)
DATA DECODER
RAM (128-bits)
RDS-ID DETECT
+5V
Vddd
Vssd
RDDA
RDCL
MODE
RST
RDS-ID/ READY
TEST
TEST
CLK(4.332MHz)
OSC
XIN
XOUT

Block diagrams

■ MAIN/CASSETTE/CD section

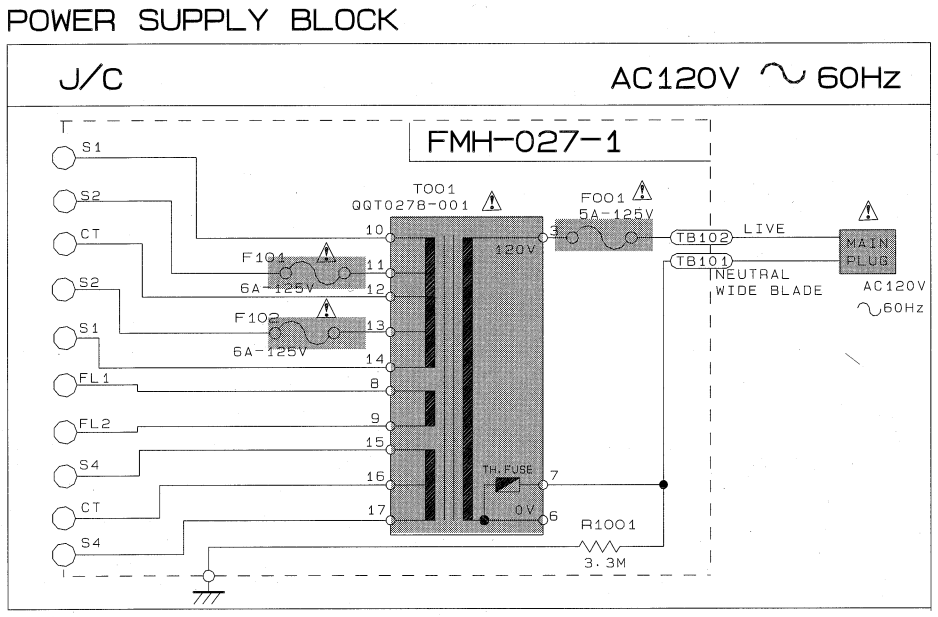

5
4
3
2
1
A
B
C
OPEN/CLOSE S991
MASTER VOLUME JS992
KEY1
K11
FW850
KEY S992~S997 DISC1~3 EJECT1~3
KEY S985 CD S986TUNER
BASS VOLUME JS992
FW951
STAND-BY S963
KEY S952 AUX S953 TAPE
CN990
FW883
FW950
FW862
CN880
CN883
CN851
CN862
VOL+/-
K22
BASSVOL+/-
K12
K21
CN815
SYSTEM CONTROL IC810 MN101C35DEA
XI,O X802 32.768kHz
OSC1,2 X801 8MHz
FW915
REMOCON IC915
FL DISPLAY TUBE FL801
CN879
CN979
KEY2 S921~S926
KEY3 S931~S938
KEY3 S927,928,939 945,946
KEY 2~4
SLCKEY1~3 PHOTO A/B SLCCE DATA,CK
CN869
RDS CLK/DA
MPX
MOTOR DRIVER IC853
CN867
ROLLING PANEL MOTOR
DOROP DORCL
VC3RESET KCLK MRDY MSTAT KCMND
CD L/R
CN865
CN860/861
CN868
CN870/871
TU L/R
CN1
TO TUNER
TX
D.OUT
PB L/R
CN315
TP101
REC L/R
FLOLDA VOLCK
SOURCE SELECTOR & E.VOL IC436
IC501, 502, 526,571
KARAOKE IC466 (Only Ver. U)
CN912
MAIN L/R
CN612
CN711
AUX
CN602
AMP IC601
J82 TO SPEAKER
CN701
L/R
AMP IC701
J81 TO SPEAKER
FW704
CN901
CN900
HP L/R
FW952
H.P. J1001
CN306
TKEY 1~3 PB/RP PHOTO
SLCCE DATA CK
CN305
PB L/R
REC L/R
PB/REC AMP IC302
PB/RP
SERIAL TO PARALLEL PORT EXTENSION IC304,IC303
DECK HEAD
HEAD SW IC301
REC L/R
CN304
CN1
IC1
RPPHOTO
TKEY2
SW4,6
TKEY1
SW5,2,1
RP MECHA
CN303
FW301
PBPHOTO
TKEY3
SW2,4,6
PB MECHA
DRIVE
CN651
TX
OUT L/R
/RESET
A+C,B+D,E,F
RF & SERVO AMP. IC601 AN8806SB
TP1
ARF
DIGITAL SERVO & DIGITAL SIGNAL PROCESSOR IC651
PICK-UP
CN601
CN801
REST SW
SPINDLE MOTOR FEED MOTOR
F± T±
BTL DRIVER IC801
MLD.MDATA MCLK.STAT
/REST
FW902
COMPANDER, LPF, ECHO MIX IC526
BUFFER AMP. IC526 (Only Ver. U)
MIC
CD CHANGER CONTROL IC251
LMUP LMDWN
L MOTOR DRIVER IC851
L MOTOR
RMUP RMDWN
R MOTOR DRIVER IC852
R MOTOR
CAM0~CAM7
1MSW~3MSW 1SSW~3SSW
CN855
CN854
CN805
LCAM
RCAM
CN804
SW1~SW6

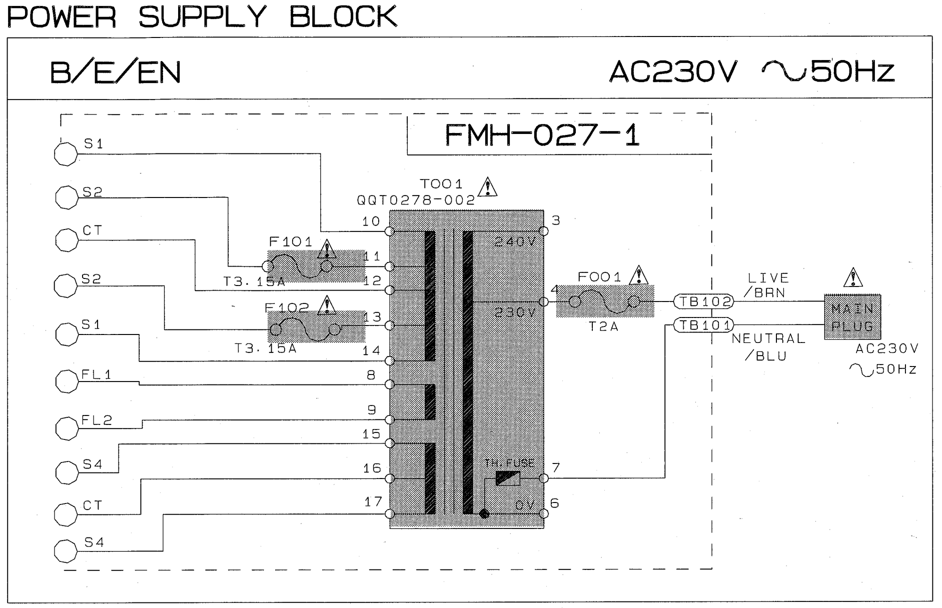
■ TUNER section


FM
AM
FM FRONTEND
TU1
IF OUT
FM / DET
AM / DET
IC1
TUNER
OUT L/R
MPX
ROCL
RODA
CN1
TO MAIN
section
AM RF
AM OSC
VT
AM/FM
$\overline{\text{AM}}$ OSC
OUT
RDS
IC3
(Only B/E/EN)
FM OSC
MW RF/OSC
COIL
PLL Synthesizer
IC2
DATA
CLOCK
PERIOD

Standard schematic diagrams

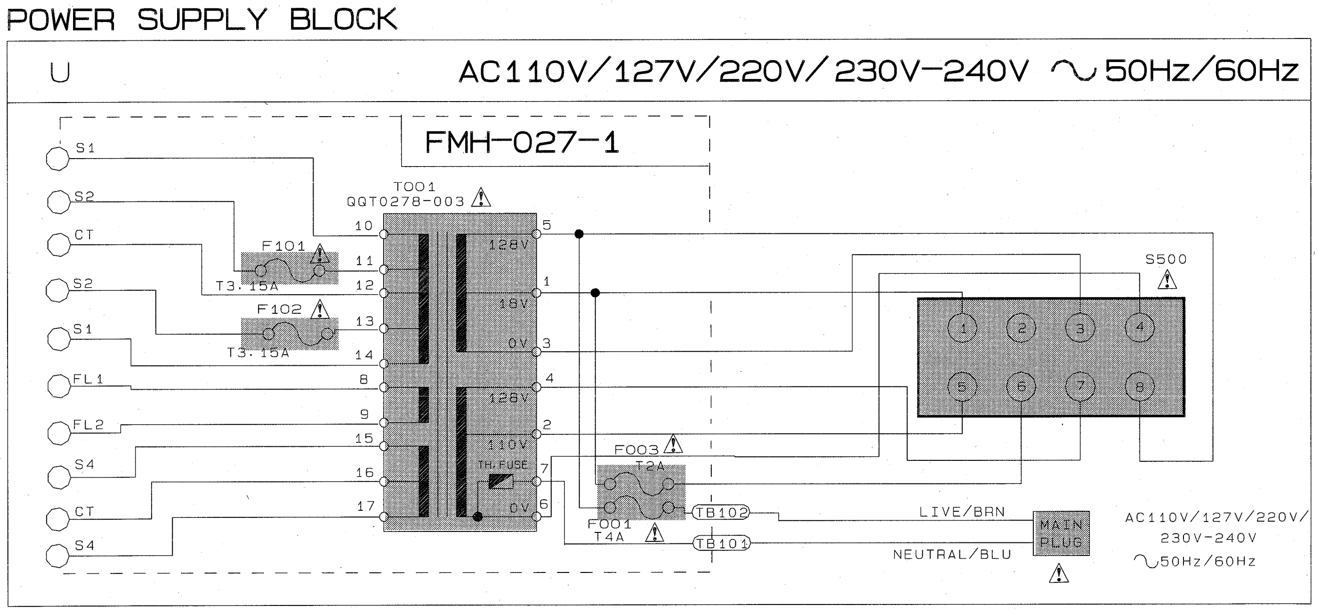
■ Power transformer section


POWER SUPPLY BLOCK
J/C
AC120V ∿ 60Hz
FMH-027-1
S1
S2
CT
S2
S1
FL1
FL2
S4
CT
S4
T001
QQT0278-001
F001
5A-125V
F101
6A-125V
F102
6A-125V
120V
TH.FUSE
0V
TB102
TB101
LIVE
NEUTRAL
WIDE BLADE
MAIN PLUG
AC120V
∿60Hz
R1001
3.3M
10
11
12
13
14
8
9
15
16
17
3
7
6

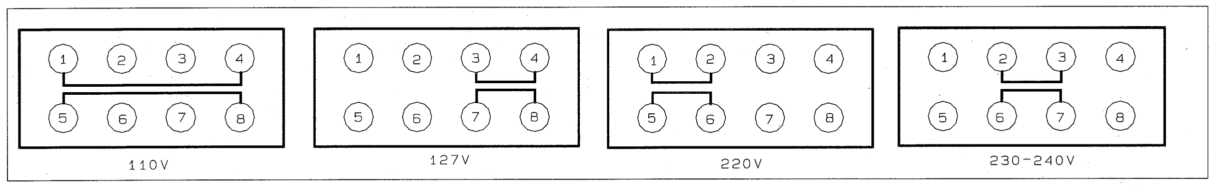

POWER SUPPLY BLOCK
B/E/EN
AC230V ∿50Hz
FMH-027-1
S1
S2
CT
S2
S1
FL1
FL2
S4
CT
S4
T001
QQT0278-002
F101
T3.15A
F102
T3.15A
240V
230V
TH.FUSE
0V
F001
T2A
TB102
TB101
LIVE
/BRN
NEUTRAL
/BLU
MAIN PLUG
AC230V
∿50Hz
10
11
12
13
14
8
9
15
16
17
3
4
7
6

VERSION CODES

J :U.S.A.
C :CANADA
B :U.K.
E :CONTINENTAL EUROPE
EN :NORDIC COUNTRIES
U :UNIVERSAL EXCEPT ALL OF ABOVES


POWER SUPPLY BLOCK
U
AC110V/127V/220V/230V-240V ∿ 50Hz/60Hz
FMH-027-1
S1
S2
CT
S2
S1
FL1
FL2
S4
CT
S4
T001
QQT0278-003
F101
T3.15A
F102
T3.15A
128V
18V
0V
128V
110V
TH.FUSE
0V
S500
F003
T2A
F001
T4A
TB102
TB101
LIVE/BRN
NEUTRAL/BLU
MAIN PLUG
AC110V/127V/220V/
230V-240V
∿50Hz/60Hz
1
2
3
4
5
6
7
8
10
11
12
13
14
8
9
15
16
17
5
1
3
4
2
7
6

VOLTAGE SELECTOR LOCATION


1
2
3
4
5
6
7
8
110V
127V
220V
230-240V

▨ ⚠ Parts are safety assurance parts. When replacing those parts make sure to use the specified.

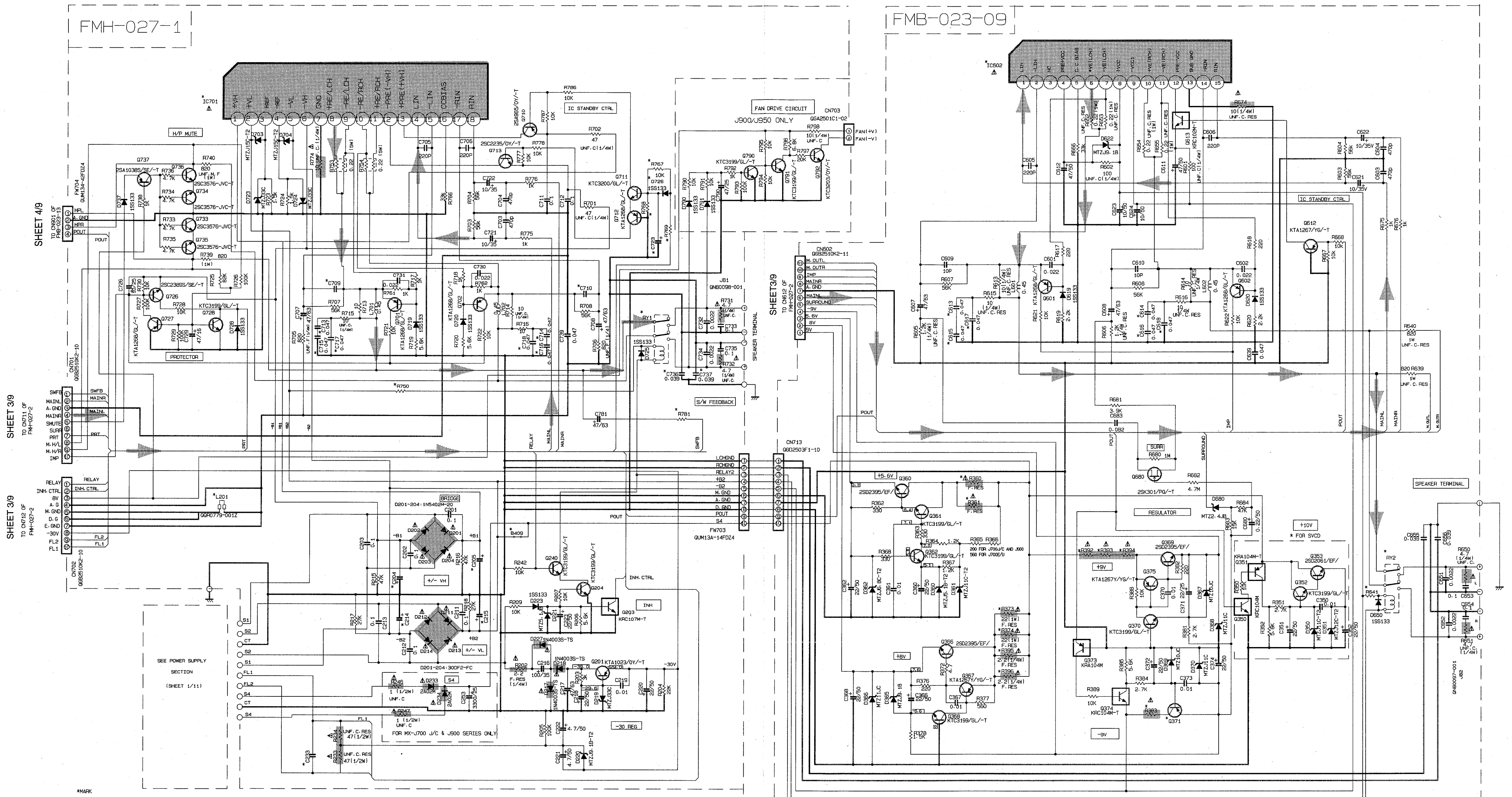
EXPLANATION OF OVERALL OF SCHEMA.

MODEL CA-MXJ900/CA-MXJ950R/MX-J900/MX-J950R

SHEET NUMPER	MODEL NUMBERS TO BE APPLIED	CIRCUITS DESCRIPTION
1/9	CA-MXJ900/CA-MXJ950R MX-J900/MX-J950R	. PRIMARY WITH MAINS TRANSFORMER
2/9	CA-MXJ900/CA-MXJ950R MX-J900/MX-J950R	. DC REGULATORS/AUDIO OUTPUT
3/9	CA-MXJ900/CA-MXJ950R MX-J900/MX-J950R	. EXTERNAL INPUT, SOURCE SELECTOR SWITCH
4/9	CA-MXJ900/CA-MXJ950R MX-J900/MX-J950R	. FL DISPLAY, SYSTEM CONTROL LSI, USER CONTROL KEYS
5/9	CA-MXJ900	. MIC AMP, ECHO CIRCUIT (ONLY FOR U)
6/9	CA-MXJ900/CA-MXJ950R MX-J900/MX-J950R	. CD SERVO AND CD SYSTEM CONTROL . CD CHANGER MECHANISM CONTROL
7/9	CA-MXJ900/CA-MXJ950R MX-J900/MX-J950R	. TAPE DECK MECHANISM CONTROL . TAPE CIRCUITS SUCH AS PRE-AMP AND BIAS
8/9	CA-MXJ900/CA-MXJ950R	. TUNER RF/IF/FM MULTIPLEX (ONLY FOR B, E, EN)
9/9	CA-MXJ900 MX-J900	. TUNER RF/IF/FM MULTIPLEX (ONLY FOR C, J, U)

SHEET 1/9

■ Power amplifier & ragulator section


FMH-027-1
FMB-023-09
IC701
IC602
H/P MUTE
PROTECTOR
IC STANDBY CTRL
FAN DRIVE CIRCUIT
J900/J950 ONLY
SHEET 4/9
SHEET 3/9
SPEAKER TERMINAL
S/W FEEDBACK
REGULATOR
SURR
+10V
* FOR SVCD
INH CTRL
INH
BRIDGE
+/- VH
+/- VL
-30 REG
SEE POWER SUPPLY SECTION (SHEET 1/11)
FOR MX-J700 J/C & J900 SERIES ONLY
5
4
3
2
1

*MARK

REF NAME / VERSION	CA-MXJ900	CA-MXJ950R	MX-J900	
	U	B.E.EN	J	C
L201	SHORT(B112)	SHORT(B112)	SHORT(B112)	SHORT(B112)
Q371	KTA1023/OY/-T	KTA1023/OY/-T	2SB1274/RS/S	2SB1274/RS/S
B409	NONE	NONE	NONE	NONE
R383	SHORT(B84)	SHORT(B84)	10(1/4W) F.RES	SHORT(B84)
R392.R393.R394	SHORT B81.82.83	SHORT B81.82.83	4.7(1/4W)F.RES	SHORT B81.82.83
C233	0.22	0.01	0.01	0.01
C613.C614.C615.C616 C713.C714.C715.C716	0.047	0.047	NONE	0.047
C617.C618 C717.C718	NONE	NONE	0.047	NONE
IC602	STK402-040	STK402-040	STK402-050	STK402-050
IC701	STK412-010	STK412-010	STK412-020	STK412-020
R767/D726	D726	D726	D726	D726
RY1.RY2	QSK0057-001	QSK0057-001	QSK0057-001	QSK0057-001
C204/C205	4700/63	4700/63	4700/63	4700/63
C214/C215	2200/35	2200/35	2200/50	2200/50
R395/R396	USED	USED	NONE	USED
R373/R374	NONE	NONE	USED	NONE
R768.R769	100K.10K	100K.10K	100K.10K	100K.10K
R360	2.2(1/4W) F.RES	2.2(1/4W) F.RES	15(1/4W) UNF.C	2.2(1/4W) F.RES
C736/C737	NONE	USED	NONE	NONE
R781	5.6K	5.6K	5.6K	5.6K
R361	4.7(1/4W) F.RES	4.7(1/4W) F.RES	15(1/4W) UNF.C	4.7(1/4W) F.RES
R641/R750	150(1/4W) UNF.C	150(1/4W) UNF.C	470(1/4W) UNF.C	470(1/4W) UNF.C
C723	100/10	100/10	100/10	100/10
C709/C710	10p	4.7p	10p	10p

▨ ⚠ Parts are safety assurance parts.
When replacing those parts make
sure to use the specified.

NOTES

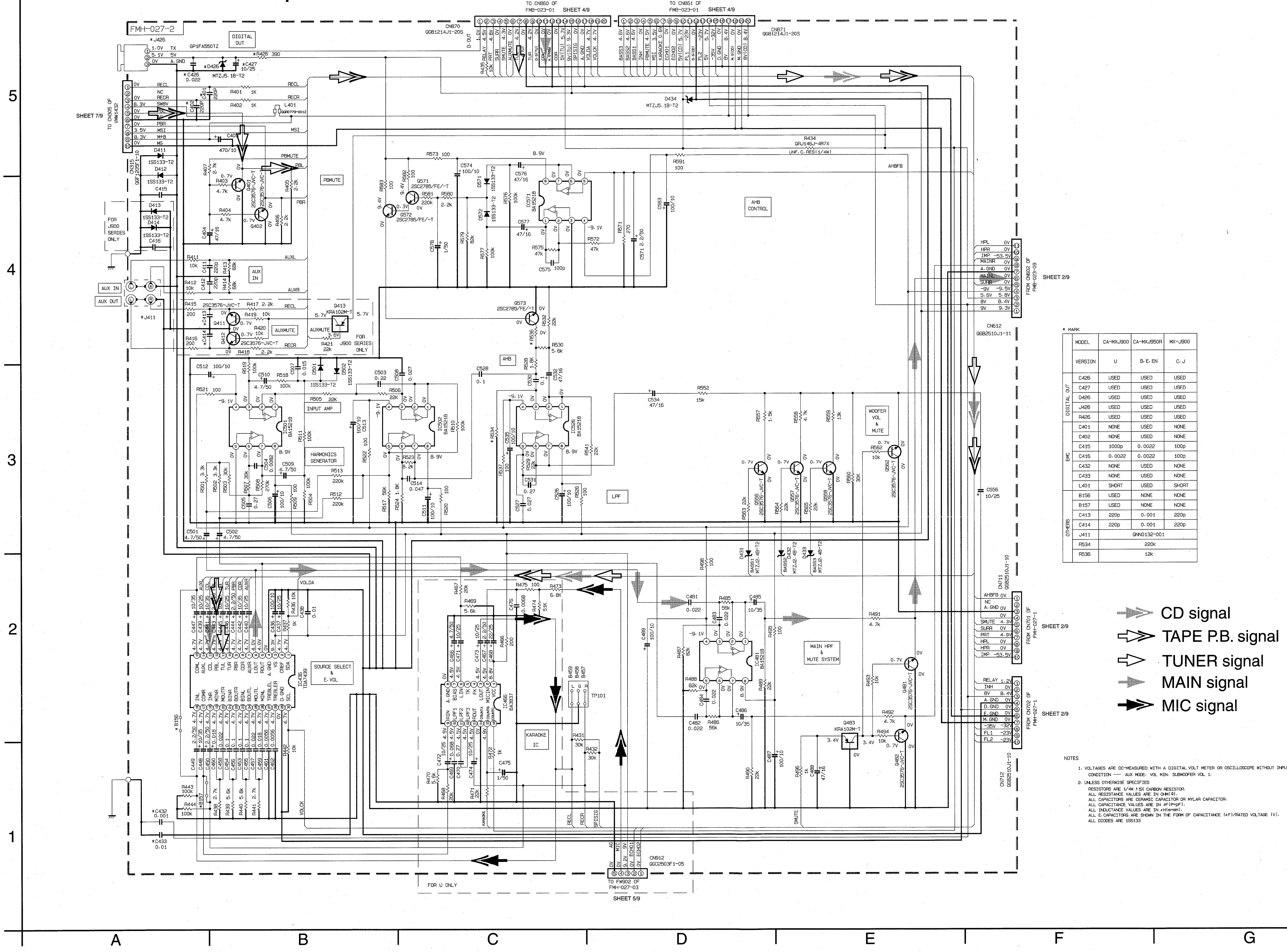
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- AUX MODE, VOL MIN, BASS OFF
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133

➡ MAIN signal

SHEET 2/9

A B C D E F G H

■ Function & Main amplifier section


FMH-027-2
TO CN860 OF FMB-023-01 SHEET 4/9
TO CN861 OF FMB-023-01 SHEET 4/9
CN870 QGB1214J1-20S
CN871 QGB1214J1-20S
DIGITAL OUT
SHEET 7/9
TO CN305 OF VWH1432
FOR J900 SERIES ONLY
AUX IN
AUX OUT
PBMUTE
AUX IN
AUXMUTE
INPUT AMP
HARMONICS GENERATOR
AHB
AHB CONTROL
LPF
WOOFER VOL & MUTE
MAIN HPF & MUTE SYSTEM
SOURCE SELECT & E.VOL
KARAOKE IC
TP101
FOR U ONLY
CN912 QGG2503F1-05
TO FW502 OF FMH-027-03
SHEET 5/9
CN602 FROM CN602 OF FMB-023-09 SHEET 2/9
CN612 QGB2510J1-11
CN711 QGB2510J1-10
FROM CN701 OF FMH-027-1 SHEET 2/9
FROM CN702 OF FMH-027-1 SHEET 2/9
CN712 QGB2510J1-10
CD signal
TAPE P.B. signal
TUNER signal
MAIN signal
MIC signal
A
B
C
D
E
F
G
1
2
3
4
5

* MARK

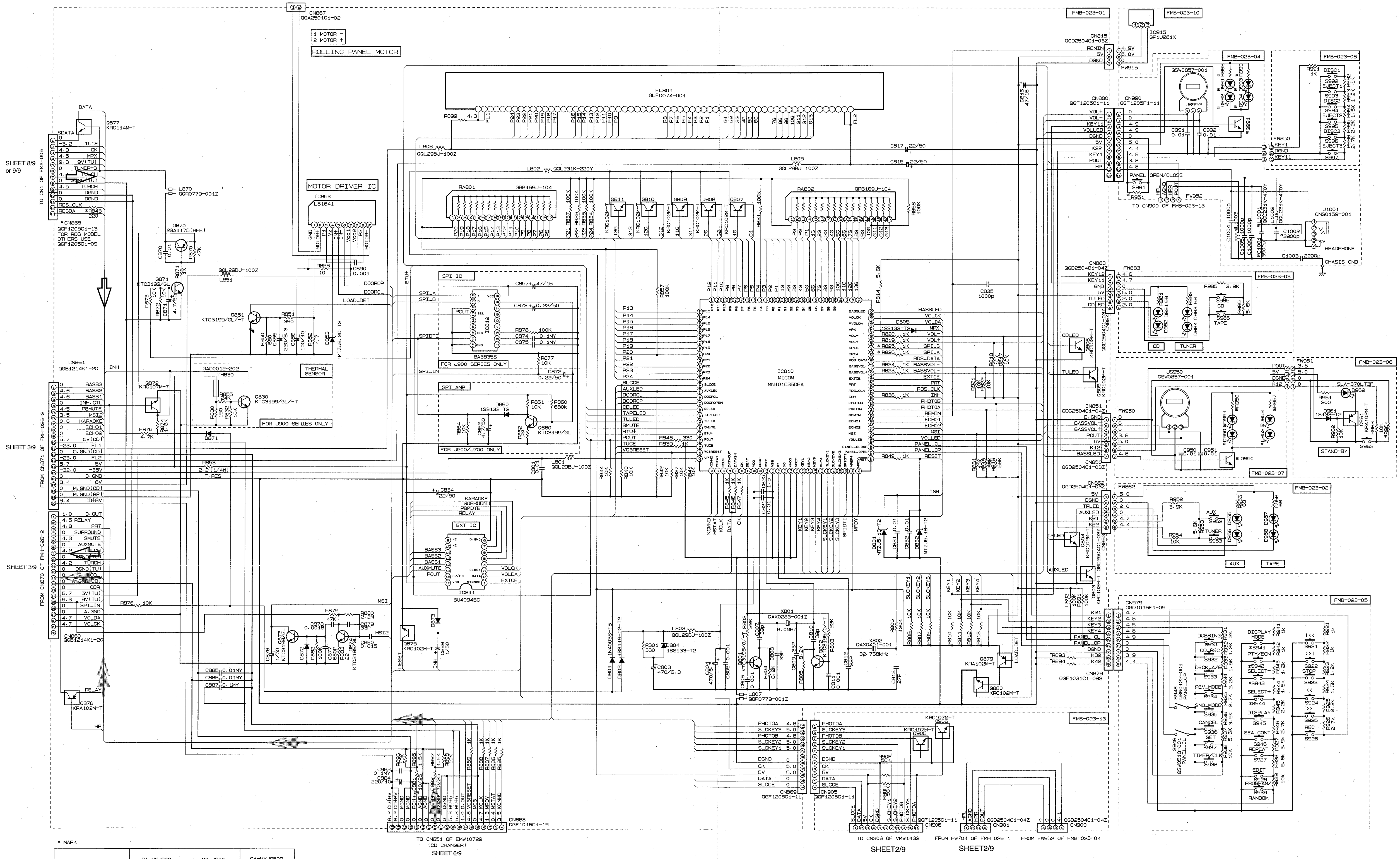
	MODEL	CA-MXJ900	CA-MXJ950R	MX-J900
	VERSION	U	B.E.EN	C.J
DIGITAL OUT	C426	USED	USED	USED
	C427	USED	USED	USED
	D426	USED	USED	USED
	J426	USED	USED	USED
	R426	USED	USED	USED
EMC	C401	NONE	USED	NONE
	C402	NONE	USED	NONE
	C415	1000p	0.0022	100p
	C416	0.0022	0.0022	100p
	C432	NONE	USED	NONE
	C433	NONE	USED	NONE
	L401	SHORT	USED	SHORT
OTHERS	B156	USED	NONE	NONE
	B157	USED	NONE	NONE
	C413	220p	0.001	220p
	C414	220p	0.001	220p
	J411	QNN0132-001		
	R534	220k		
	R536	12k		

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- AUX MODE. VOL MIN. SUBWOOFER VOL 1.
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133

SHEET 3/9

■ FL Display & system controller section


FL801
QLF0074-001
IC810
MICOM
MN101C35DEA
MOTOR DRIVER IC
IC853
LB1641
ROLLING PANEL MOTOR
1 MOTOR -
2 MOTOR +
CN867
QGA2501C1-02
SPI IC
IC812
BA3835S
FOR J900 SERIES ONLY
SPI AMP
FOR J500/J700 ONLY
EXT IC
IC811
BU4094BC
THERMAL SENSOR
FOR J900 SERIES ONLY
RA801
QRB169J-104
RA802
QRB169J-104
X801
QAX0283-001Z
X802
QAX0201-001
32.768KHz
CN851
QGB1214K1-20
CN850
QGB1214K1-20
CN865
QGF1205C1-13
FOR RDS MODEL
OTHERS USE
QGF1205C1-09
CN888
QGF1016C1-19
CN869
QGF1205C1-11
CN905
QGF1205C1-11
CN880
QGF1205C1-11
CN990
QGF1205F1-11
CN815
QGD2504C1-03Z
IC915
GP1U281X
J1001
QNS0159-001
HEADPHONE
CHASIS GND
JS950
QSW0857-001
JS992
QSW0857-001
CN979
QGD1016F1-09
CN879
QGF1031C1-09S
FMB-023-01
FMB-023-10
FMB-023-04
FMB-023-08
FMB-023-03
FMB-023-06
FMB-023-07
FMB-023-02
FMB-023-05
FMB-023-13
SHEET 8/9
or 9/9
TO CN1 OF FMK-006
SHEET 3/9
FROM CN871 OF FMH-026-2
SHEET 3/9
FROM CN870 OF FMH-026-2
TO CN651 OF EMW10729
(CD CHANGER)
SHEET 6/9
TO CN305 OF VMW1432
SHEET2/9
FROM FW704 OF FMH-026-1
SHEET2/9
FROM FW952 OF FMB-023-04
STAND-BY
CD
TUNER
TAPE
AUX
DISPLAY MODE
PTY/EON
SELECT-
SELECT+
DISPLAY
SEA.CONT
REPEAT
EDIT
PROGRAM
RANDOM
CANCEL
SET
TIMER/CLK
DUBBING
CD REC
DECK A/B
REV.MODE
SND.MODE
OPEN/CLOSE
PANEL
DISC1
DISC2
DISC3
EJECT1
EJECT2
EJECT3
REC
STOP

* MARK

	CA-MXJ900 U	MX-J900 C, J	CA-MXJ950R B, E, EN
R964	18K	18K	18K
R951	75K	75K	330K
R893	75K	75K	75K
R894	330K	75K	330K
D950, D992 D951, D991	SLA-570JT3F	SLA-570JT3F	SLA-570JT3F
D952, D994 D953, D993	SLA-570JT3F	SLA-570JT3F	SLA-570JT3F
R950, R957, R998, R999	75	75	75
Q950, Q991	KRC102M-T	KRC102M-T	KRC102M-T
S941, S942, S943, S944	NONE	NONE	QSW0825-001Z
L1001, L1002	SHORT	SHORT	QQL231K-470Y
C1001, C1002	NONE	NONE	3900P
L1003	QQL231K-2R2Y	QQL231K-2R2Y	QQR0779-001Z
R825, R826	USE	USE	USE
R843	NONE	NONE	USE
X801	QAX0283-001Z	QAX0283-001Z	QAX0283-001Z

NOTES

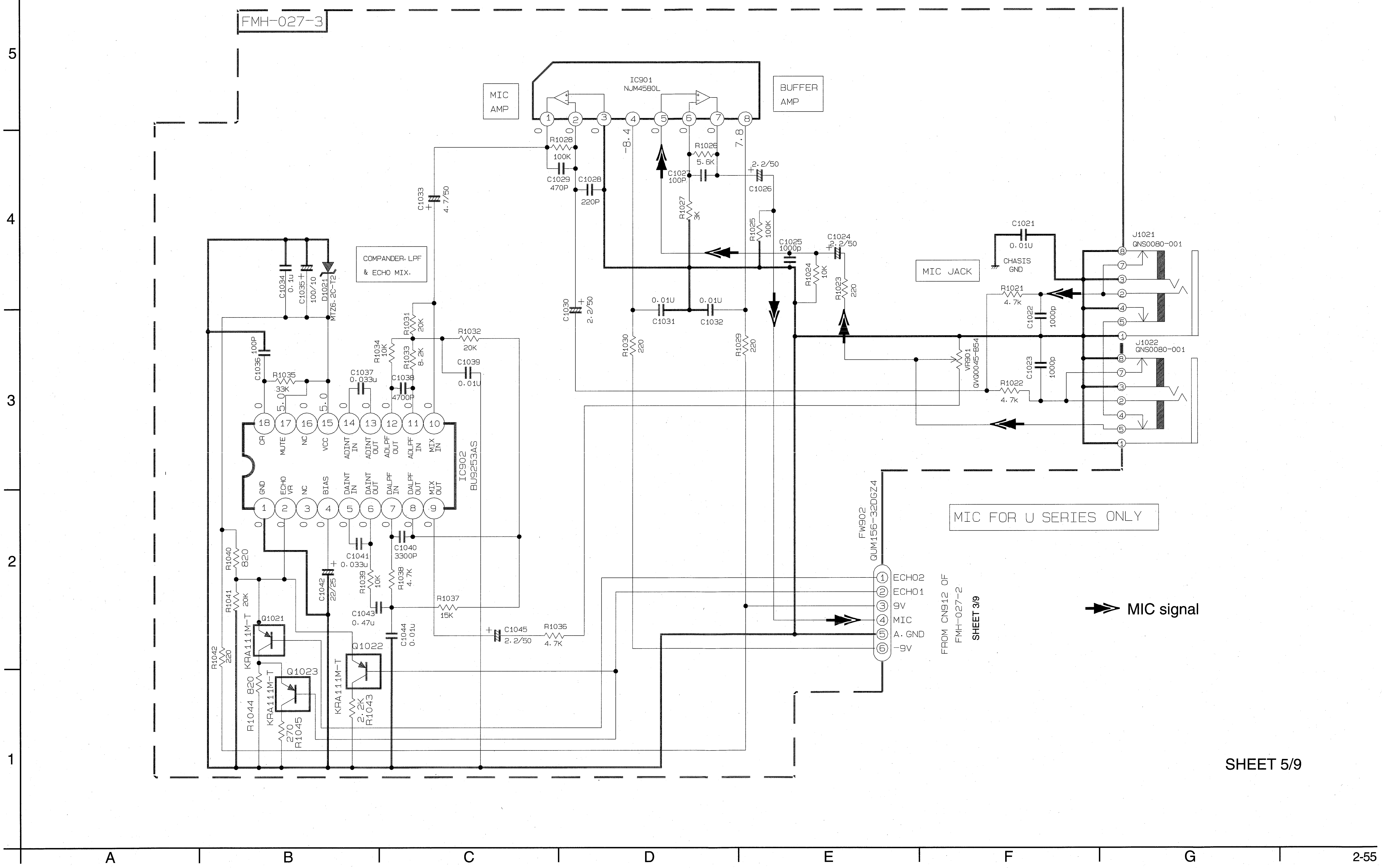
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL.
   CONDITION --- AUX MODE, VOL MIN, BASS OFF
2. UNLESS OTHERWISE SPECIFIED
   RESISTORS ARE 1/4W ±5% CARBON RESISTOR.
   ALL RESISTANCE VALUES ARE IN OHM(Ω).
   ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR.
   ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   ALL E.CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).
   ALL DIODES ARE 1SS133

⇨ TUNER signal

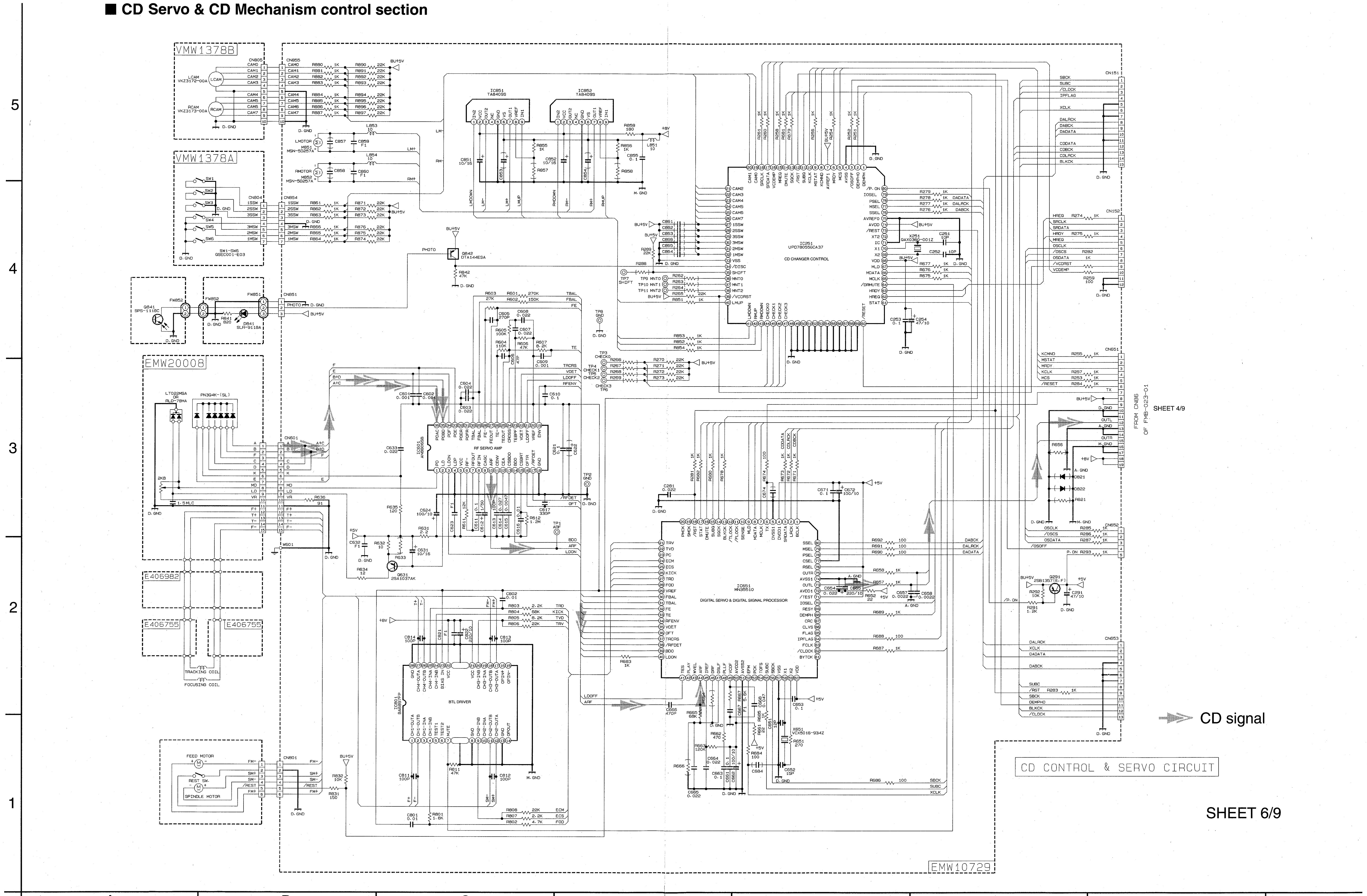
⇨ CD signal

SHEET 4/9

■ Microphone amplifier section

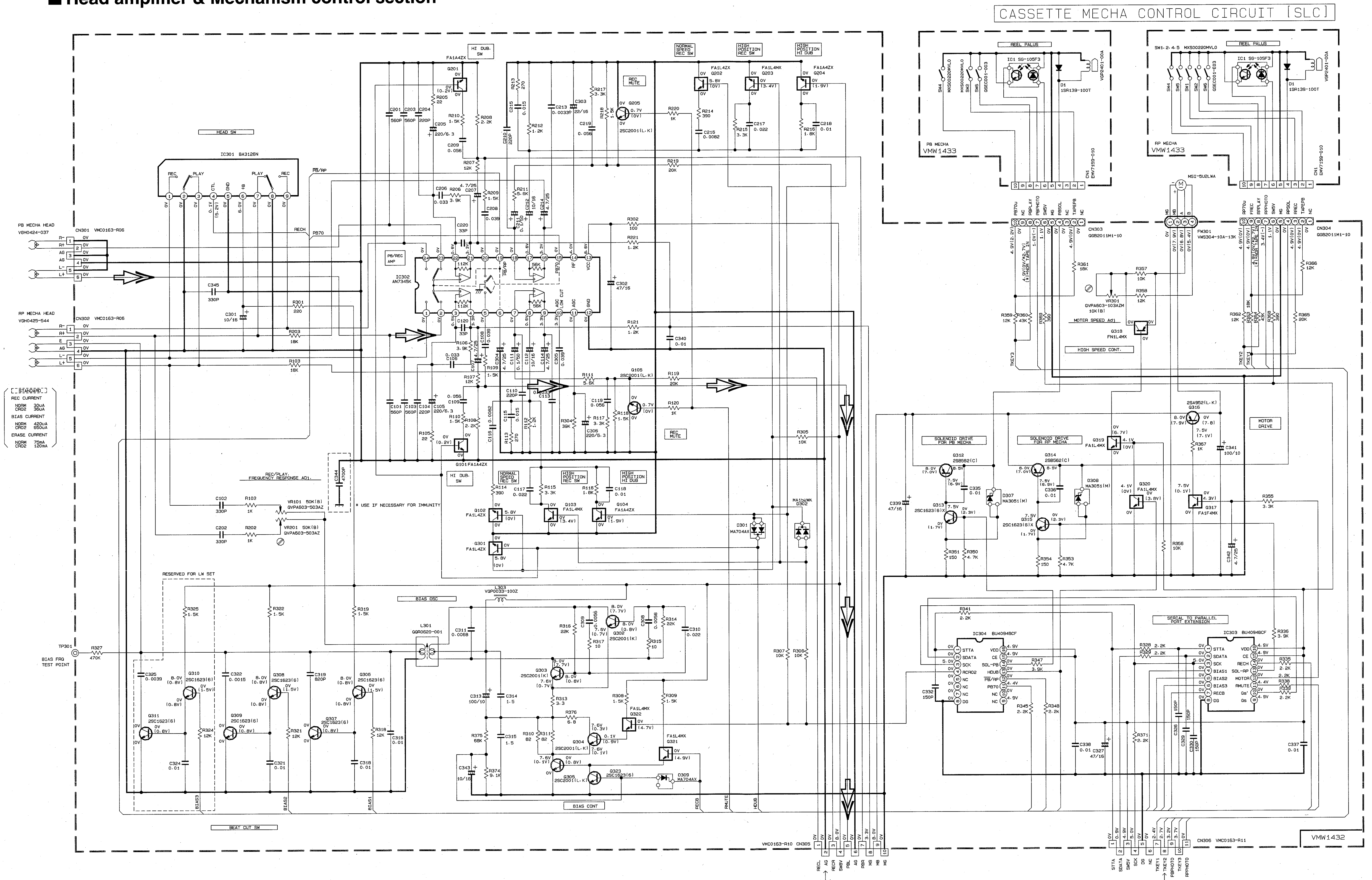

FMH-027-3
IC901
NJM4580L
MIC AMP
BUFFER AMP
R1028 100K
C1029 470P
C1028 220P
R1026 5.6K
C1027 100P
C1026 2.2/50
R1027 3K
R1025 100K
C1025 1000p
C1024 2.2/50
R1024 10K
R1023 220
C1031 0.01U
C1032 0.01U
R1030 220
R1029 220
C1030 2.2/50
C1033 4.7/50
-8.4
7.8
COMPANDER, LPF & ECHO MIX.
C1034 0.1u
C1035 100/10
D1021 MTZ6.2C-T2
C1036 100P
R1035 33K
R1031 20K
R1032 20K
R1033 8.2K
R1034 10K
C1037 0.033u
C1038 4700P
C1039 0.01U
IC902 BU9253AS
CR
MUTE
NC
VCC
ADINT IN
ADINT OUT
ADLPF OUT
ADLPF IN
MIX IN
GND
ECHO VR
BIAS
DAINT IN
DAINT OUT
DALPF IN
DALPF OUT
MIX OUT
5.0
C1041 0.033u
C1040 3300P
R1039 10K
R1038 4.7K
C1042 22/25
C1043 0.47u
C1044 0.01u
R1037 15K
C1045 2.2/50
R1036 4.7K
R1040 820
R1041 20K
R1042 220
Q1021
KRA111M-T
Q1023
KRA111M-T
Q1022
KRA111M-T
R1044 820
R1045 270
R1043 2.2K
MIC JACK
C1021 0.01U
CHASIS GND
J1021 QNS0080-001
J1022 QNS0080-001
R1021 4.7K
R1022 4.7K
C1022 1000p
C1023 1000p
VR901 QVQ0045-B54
MIC FOR U SERIES ONLY
FW902 QUM156-32DGZ4
① ECHO2
② ECHO1
③ 9V
④ MIC
⑤ A.GND
⑥ -9V
FROM CN912 OF FMH-027-2
SHEET 3/9
MIC signal
SHEET 5/9
A
B
C
D
E
F
G
1
2
3
4
5

■ CD Servo & CD Mechanism control section


VMW1378B
VMW1378A
EMW20008
E406982
E406755
E406755
EMW10729
CN805
CN855
CN804
CN854
CN851
CN601
CN801
CN151
CN152
CN651
CN652
CN653
LCAM VKZ3172-00A
RCAM VKZ3173-00A
SW1-SW6 QSE0001-E03
Q841 SPS-111BC
D841 SLR-931BA
Q842 DTA144ESA
LMOTOR M851 MSN-50257A
RMOTOR M852 MSN-50257A
IC851 TA8409S
IC852 TA8409S
IC251 UPD78055GCA37
CD CHANGER CONTROL
IC601 AN8805SB
RF SERVO AMP
IC651 MN35510
DIGITAL SERVO & DIGITAL SIGNAL PROCESSOR
IC801 BA5937FP
BTL DRIVER
Q631 2SA1037AK
Q291 2SB1357(E-F)
X251 QAX0360-001Z
X651 VCX5016-934Z
LT022MSA OR RLD-78MA
PN3Q4K-(SL)
TRACKING COIL
FOCUSING COIL
FEED MOTOR
REST SW.
SPINDLE MOTOR
FROM CN86 OF FMB-023-01
SHEET 4/9
CD CONTROL & SERVO CIRCUIT
CD signal
BU+5V
+5V
+8V
D.GND
A.GND
M.GND
1
2
3
4
5
A
B
C
D
E
F
G
H

SHEET 6/9

■ Head amplifier & Mechanism control section


CASSETTE MECHA CONTROL CIRCUIT [SLC]
PB MECHA VMW1433
RP MECHA VMW1433
REEL PALUS
IC1 SG-105F3
D1 1SR139-100T
MSI-5U2LWA
CN303 GGB2011M1-10
CN304 GGB2011M1-10
FW301 VWS304-10A-13K
VR301 GVPA503-103AZM 10K(B)
MOTER SPEED ADJ.
HIGH SPEED CONT.
Q318 FN1L4M
MOTOR DRIVE
SOLENOID DRIVE FOR PB MECHA
SOLENOID DRIVE FOR RP MECHA
SERIAL TO PARALLEL PORT EXTENSION
IC304 BU4094BCF
IC303 BU4094BCF
VMW1432
PB MECHA HEAD VGH0424-037
RP MECHA HEAD VGH0425-544
CN301 VMC0163-R06
CN302 VMC0163-R06
HEAD SW
IC301 BA3126N
IC302 AN7345K
PB/REC AMP
HI DUB. SW
NORMAL SPEED REC SW
HIGH POSITION REC SW
HIGH POSITION HI DUB
REC MUTE
REC/PLAY FREQUENCY RESPONSE ADJ.
VR101 50K(B) GVPA503-503AZ
VR201 50K(B) GVPA503-503AZ
* USE IF NECESSARY FOR IMMUNITY
STANDARD
REC CURRENT
NORM 30uA
CRO2 36uA
BIAS CURRENT
NORM 420uA
CRO2 650uA
ERASE CURRENT
NORM 75mA
CRO2 120mA
RESERVED FOR LW SET
BIAS OSC
L303 VQP0033-100Z
L301 GQR0620-001
TP301 BIAS FRQ TEST POINT
BIAS CONT
BEAT CUT SW
VMC0163-R10 CN305
CN306 VMC0163-R11
A B C D E F G
1 2 3 4 5

CN305: 1 RECL 0V · 2 AG 0V · 3 RECR 0V · 4 SW8V 8.0V · 5 PBL 0V · 6 AG 0V · 7 PBR 0V · 8 MS 3.3V · 9 MB 8.0V · 10 MG 0V

GARD GND → NOT CONNECT TO SET

CN306: 1 STTA 0V · 2 SDATA 0.9V · 3 SW5V 4.9V · 4 SCK 5.0V · 5 DG 0V · 6 NC 0V · 7 TKEY1 2.4V · 8 TKEY2 2.7V · 9 PBPHOTO 3.2V · 10 TKEY3 3.7V · 11 RPPHOTO 0V

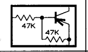
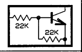
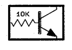
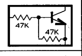
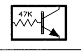
DEFFERENT TO SINGL MECHA

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. ( ) IS INVERT MODE
2. UNLESS OTHERWISE SPECIFIED
   - ALL RESISTANCE VALUES ARE IN OHM(Ω).
   - ALL CAPACITORS ARE CERAMIC CAPACITOR
   - ALL CAPACITANCE VALUES ARE IN μF(P=pF).
   - ALL INDUCTANCE VALUES ARE IN μH(m=mH).
   - ALL E. CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V).

═ PP PLYPROPYLENE CAPACITOR

TABLE 1. DIGITAL TR LIST

PART. NO	CONSTRVCTION	REF. NO	PART. NO	CONSTRVCTION	REF. NO
FN1L4M		Q318	FA1F4M		Q317
FA1A4Z		Q101/Q201 Q104/Q204	FA1L4M		Q103/Q203 Q319 Q320/Q321/Q322
FA1L4Z		Q102/Q202 Q301			

FROM PRE-AMP CIRCUIT

FROM CN315 OF FMH-027-2

SHEET 3/9

FROM MICON CIRCUIT

FROM CN869 OF FMB-023-01

SHEET 4/9

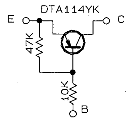
⇨ TAPE P.B. signal

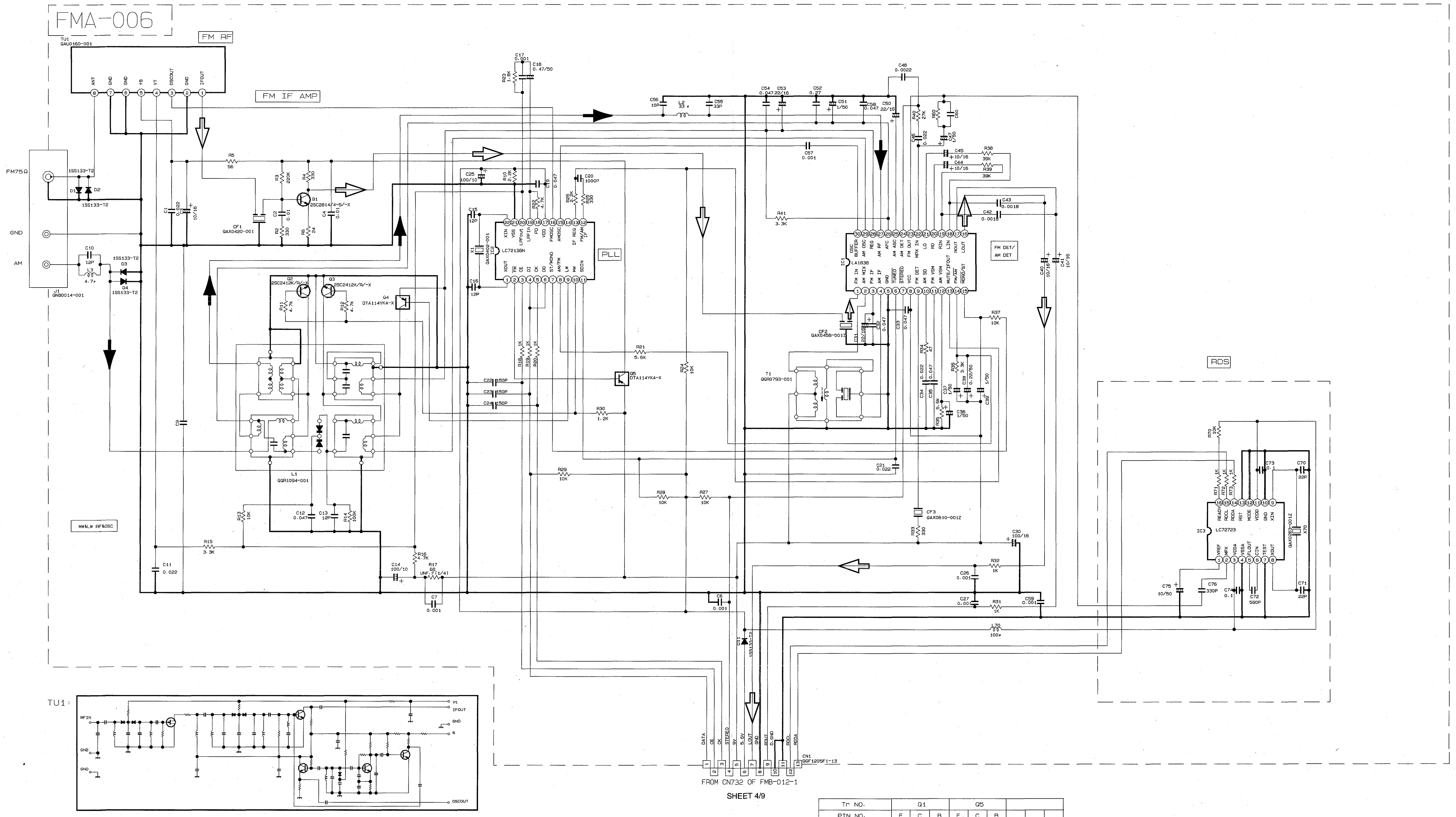
SHEET 7/9

■ Tuner section (Only Ver B. E. EN)

NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE 1/8W ±5% METAL GLAZE RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPASITANCE VALUES ARE IN μF(P=pF).
5. ALL E.CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (μF)/RATED VOLTAGE (V).
6. SI DIODES (▶|) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.
   Q1 2SC2814/4-5/-X Q2, Q3 2SC2412K/R/-X
   Q4, Q5 DTA114YKA-X
8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.


DTA114YK
E
C
47K
10K
B


FMA-006
FM RF
TU1
QAU0160-001
ANT
GND
GND
+B
VT
OSCOUT
GND
IFOUT
FM IF AMP
FM75Ω
GND
AM
J1
QNB0014-001
1SS133-T2
D1
D2
D3
D4
C10
12P
L3
4.7μ
R5
56
Q1
2SC2814/4-5/-X
CF1
QAX0420-001
Q2
2SC2412K/R/-X
Q3
2SC2412K/R/-X
Q4
DTA114YKA-X
L1
QQR1094-001
MW/LW RF&OSC
R15
3.3K
C11
0.022
C14
100/10
R16
4.7K
R17
68
UNF.F(1/4)
C7
0.001
X1
QAX0402-001
IC2
LC72136N
PLL
R21
5.6K
Q5
DTA114YKA-X
R30
1.2K
R29
10K
R28
10K
R27
10K
C56
10P
L2
33μ
C55
33P
C54
0.047
C53
22/16
C52
0.27
C51
1/50
C58
0.047
C50
22/16
C48
0.0022
C57
0.001
R41
3.3K
IC1
LA1838
FM DET/
AM DET
CF2
QAX0458-001Z
T1
QQR0793-001
C43
0.0018
C42
0.0018
R37
10K
C21
0.022
CF3
QAX0610-001Z
R33
330
C30
100/16
R32
1K
C26
0.001
C27
0.001
R31
1K
C59
0.001
L70
100μ
C5
0.001
D11
1SS133-T2
RDS
IC3
LC72723
X70
QAX0625-001Z
C73
C70
22P
C71
22P
C75
10/50
C76
330P
C72
560P
DATA
CE
CK
STEREO
5.6V
9V
GND
ROUT
L.GND
LOUT
RDCL
RDDA
CN1
QGF1205F1-13
FROM CN732 OF FMB-012-1
SHEET 4/9
TU1:
RFIN
GND
GND
VT
IFOUT
GND
B
OSCOUT

⇨ FM/TUNER signal

➡ AM signal

	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	3.6	2.7
	FM 60dB STEREO	3.6	8.9	3.6	3.6	0	0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.6	3.6	3.6	3.6	2.7
	AM NO SIGNAL	3.5	9.0	3.5	3.5	0	5.0	5.1	9.0	2.6	1.3	0	0	0.9	4.7	5.5	4.3	4.3	4.3	4.3	3.3	3.2	2.8	ust	0.7	0.7	3.6	3.6	3.6	3.6	2.1
IC2	FM NO SIGNAL	2.5	0	0	5.0	4.9	5.0	7.9	7.8	3.6	6.1	5.1	0	0	0	0	2.5	5.1	0.9	0.9	3.8	0	2.3								

Tr NO.	Q1			Q5					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHz NO SIGNAL	0	7.1	0.85	8.9	8.8	0			
AM 522KHz NO SIGNAL	0	0	0	9.0	0	8.9			
Tr NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHz NO SIGNAL	0	0	0.7	0	0	0.7	0	3.6	0.7
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.6

SHEET 8/9

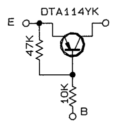
■ Tuner section (Only Ver J. C. U)

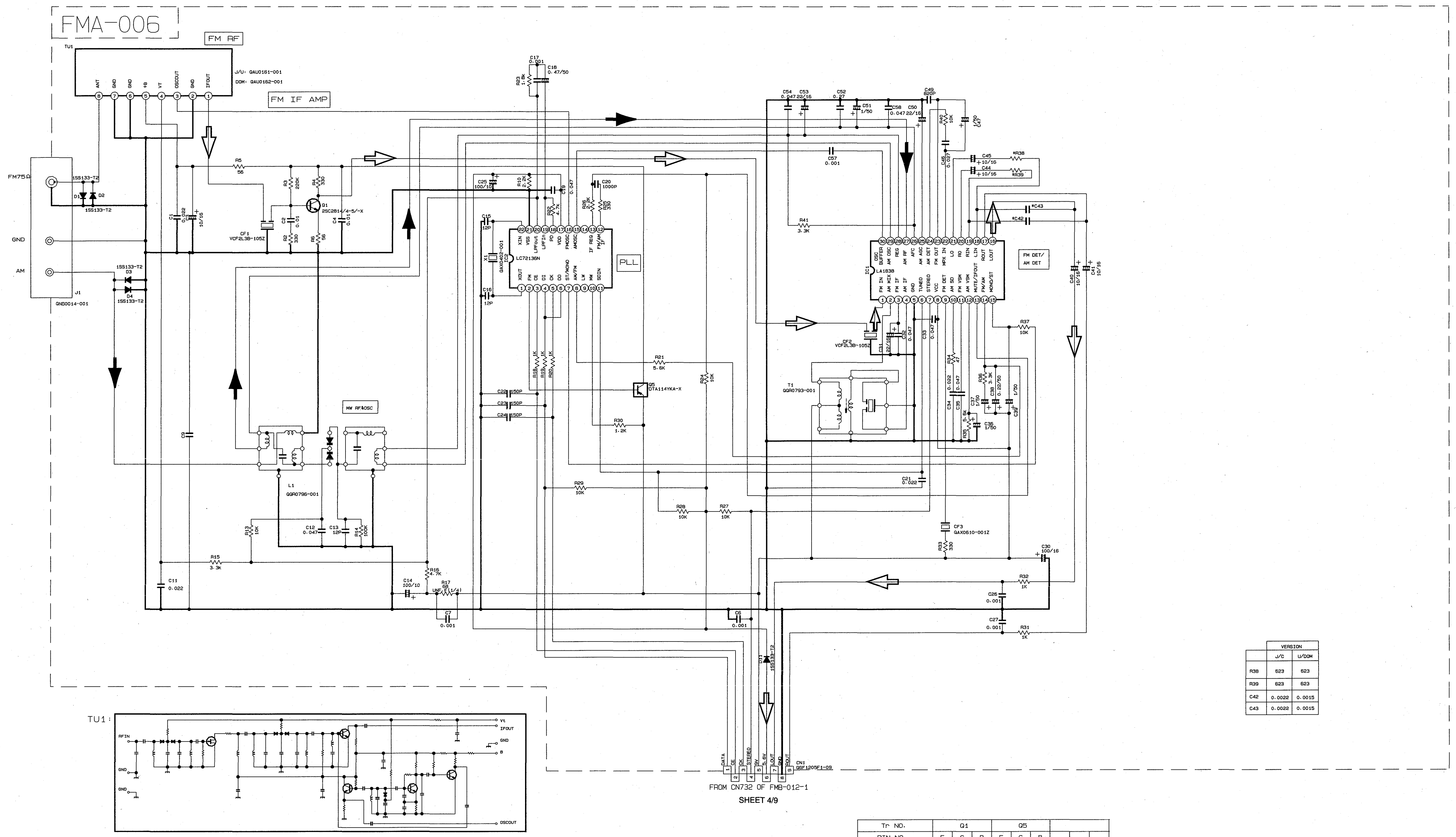
NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER.
2. ALL RESISTORS ARE 1/8W ±5% METAL GLAZE RESISTOR.
3. ALL RESISTANCE VALUES ARE IN OHM(Ω).
4. ALL CAPASITANCE VALUES ARE IN μF(P=pF).
5. ALL E.CAPASITORS ARE SHOWN IN THE FORM OF CAPASITANCE (μF)/RATED VOLTAGE (V).
6. SI DIODES (▶|) ARE ALL 1SS133-T THAT CAN BE CHANGED TO SIMILAR DIODE SUCH AS MA165 OR HSS104J.
7. PARTS NO. OF TRANSISTORS ARE AS FOLLOWS.

   Q1 2SC2814/4-5/-X Q2, Q3 2SC2412K/R/-X

   Q4, Q5 DTA114YKA-X
8. INSIDE OF DIGITAL TRANSISTORS ARE SHOWN AS FOLLOWS.


DTA114YK
E
C
B
47K
10K


FMA-006
FM RF
TU1
J/U: QAU0161-001
DOM: QAU0162-001
ANT
GND
VT
OSCOUT
IFOUT
FM IF AMP
FM75Ω
GND
AM
J1
QNS0014-001
1SS133-T2
D1
D2
D3
D4
CF1
VCF2L3B-105Z
Q1
2SC2814/4-5/-X
PLL
LC72136N
IC2
X1
FM DET/
AM DET
IC1
LA1838
CF2
VCF2L3B-105Z
T1
QQR0793-001
Q5
DTA114YKA-X
MW RF&OSC
L1
QQR0796-001
CF3
QAX0610-001Z
CN1
QGF1205F1-09
DATA
CE
CK
STEREO
TUNED
5.6V
LOUT
GND
ROUT
FROM CN732 OF FMB-012-1
SHEET 4/9
TU1:
RFIN
GND
VT
IFOUT
GND
B
OSCOUT
5
4
3
2
1
A
B
C
D
E
F
G

	VERSION	
	J/C	U/DOM
R38	623	623
R39	623	623
C42	0.0022	0.0015
C43	0.0022	0.0015

	CONDITION PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
IC1	FM NO SIGNAL	3.6	8.9	3.6	3.6	0	5.0	5.0	8.9	8.9	1.3	0.1	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.5	3.5	3.6	3.6	2.7
	FM 60dB STEREO	3.6	8.9	3.6	3.6	0	0	5.0	8.9	8.9	1.3	4.3	0	0.9	7.8	7.8	4.3	4.3	4.3	4.3	3.4	3.4	2.8	3.4	0	0	3.6	3.6	3.6	3.6	2.7
	AM NO SIGNAL	3.5	9.0	3.5	3.5	0	5.0	5.1	9.0	2.6	1.3	0	0	0.9	4.7	5.5	4.3	4.3	4.3	4.3	3.3	3.2	2.8	ust	0.7	0.7	3.6	3.6	3.6	3.6	2.1
IC2	FM NO SIGNAL	2.5	0	0	5.0	4.9	5.0	7.9	7.8	3.6	6.1	5.1	0	0	0	0	2.5	5.1	0.9	0.9	3.8	0	2.3								

Tr NO.	Q1			Q5					
PIN NO.	E	C	B	E	C	B			
FM 87.5MHz NO SIGNAL	0	7.1	0.85	8.9	8.8	0			
AM 522KHz NO SIGNAL	0	0	0	9.0	0	8.9			
Tr NO.	Q2			Q3			Q4		
PIN NO.	E	C	B	E	C	B	E	C	B
AM 522KHz NO SIGNAL	0	0	0.7	0	0	0.7	0	3.6	0.7
AM 144KHz NO SIGNAL	0	0	0.3	0	0.3	0.3	3.6	3.6	3.6

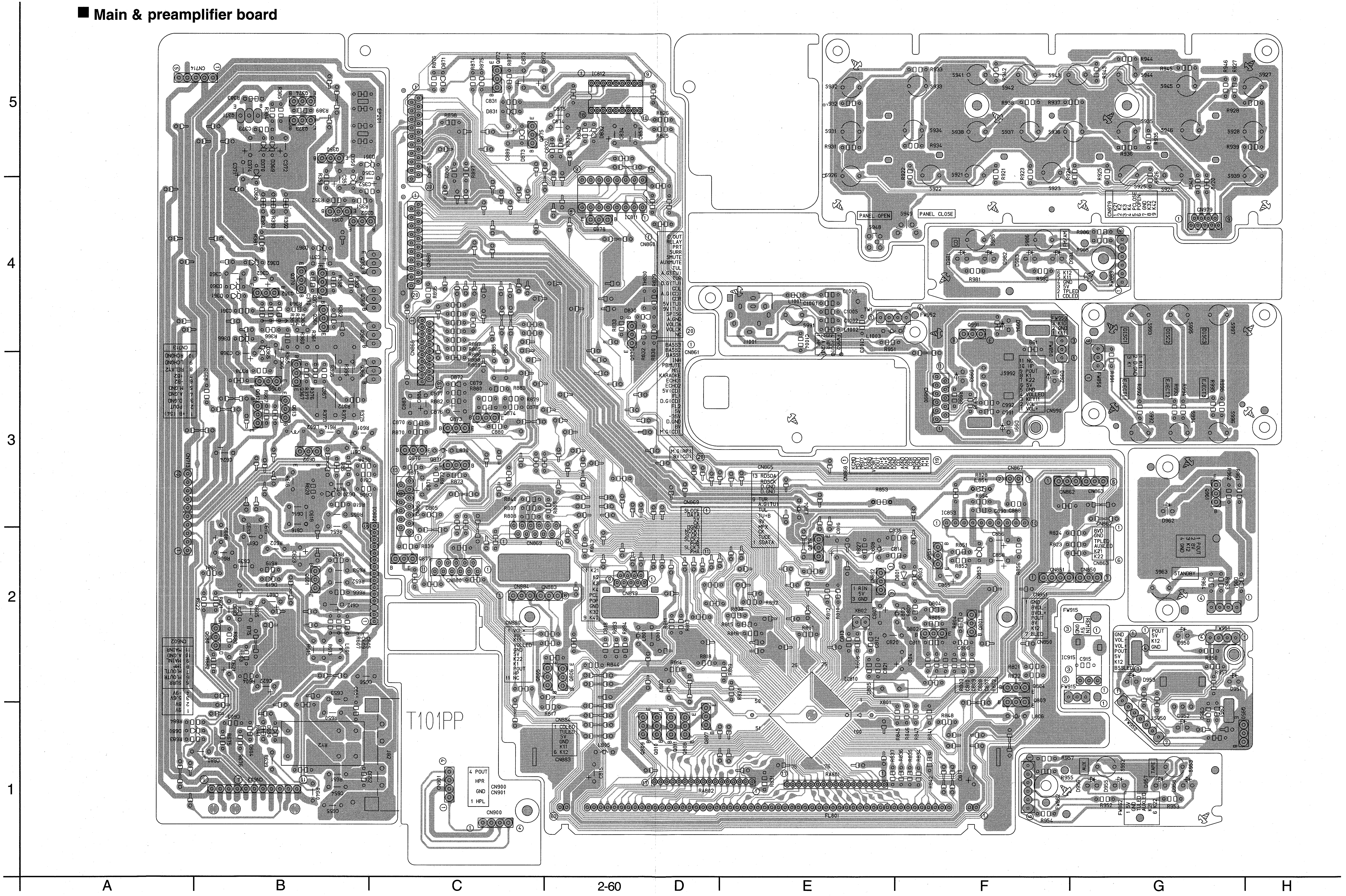
⇨ FM/TUNER signal

➡ AM signal

SHEET 9/9

Printed circuit boards

■ Main & preamplifier board


T101PP
PANEL OPEN
PANEL CLOSE
STANDBY
FL801
IC810
IC811
IC812
CN900
CN901
CN979
CN714
CN602
CN713
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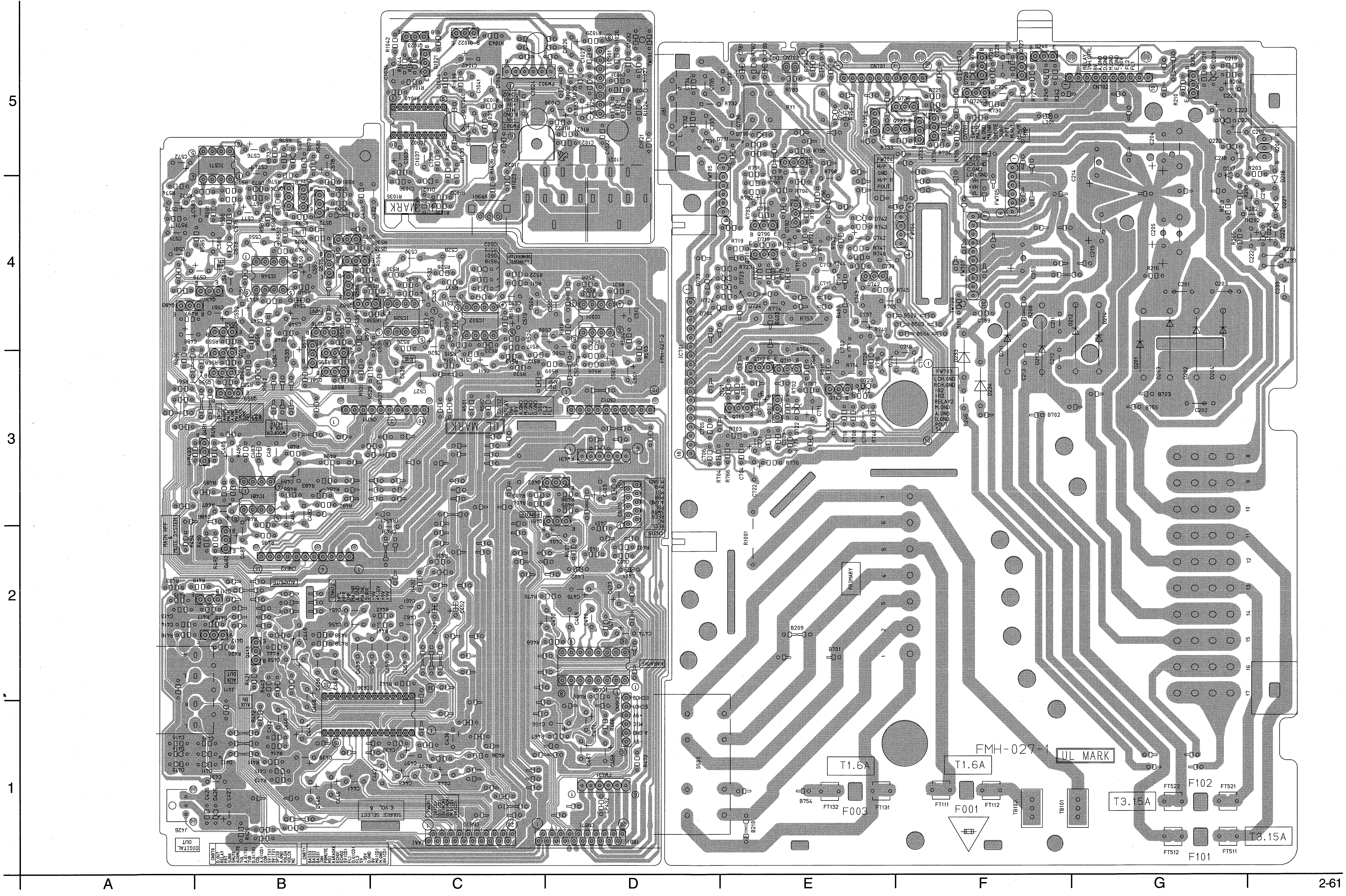
Input/output & power board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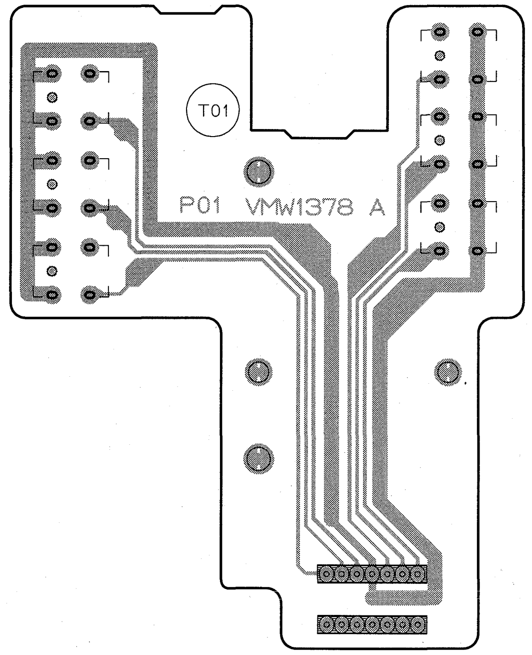
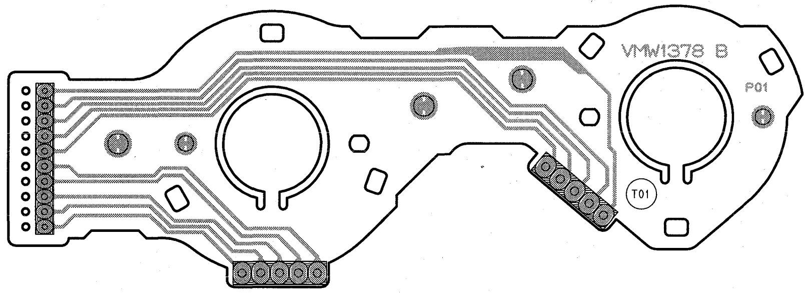
G
FMH-027-1
FMH-027-2
UL MARK
T1.6A
T3.15A
F001
F003
F101
F102
PRIMARY
DIGITAL OUT
AUX IN
AUX OUT
SOURCE SELECT
E.VOL &
KARAOKE

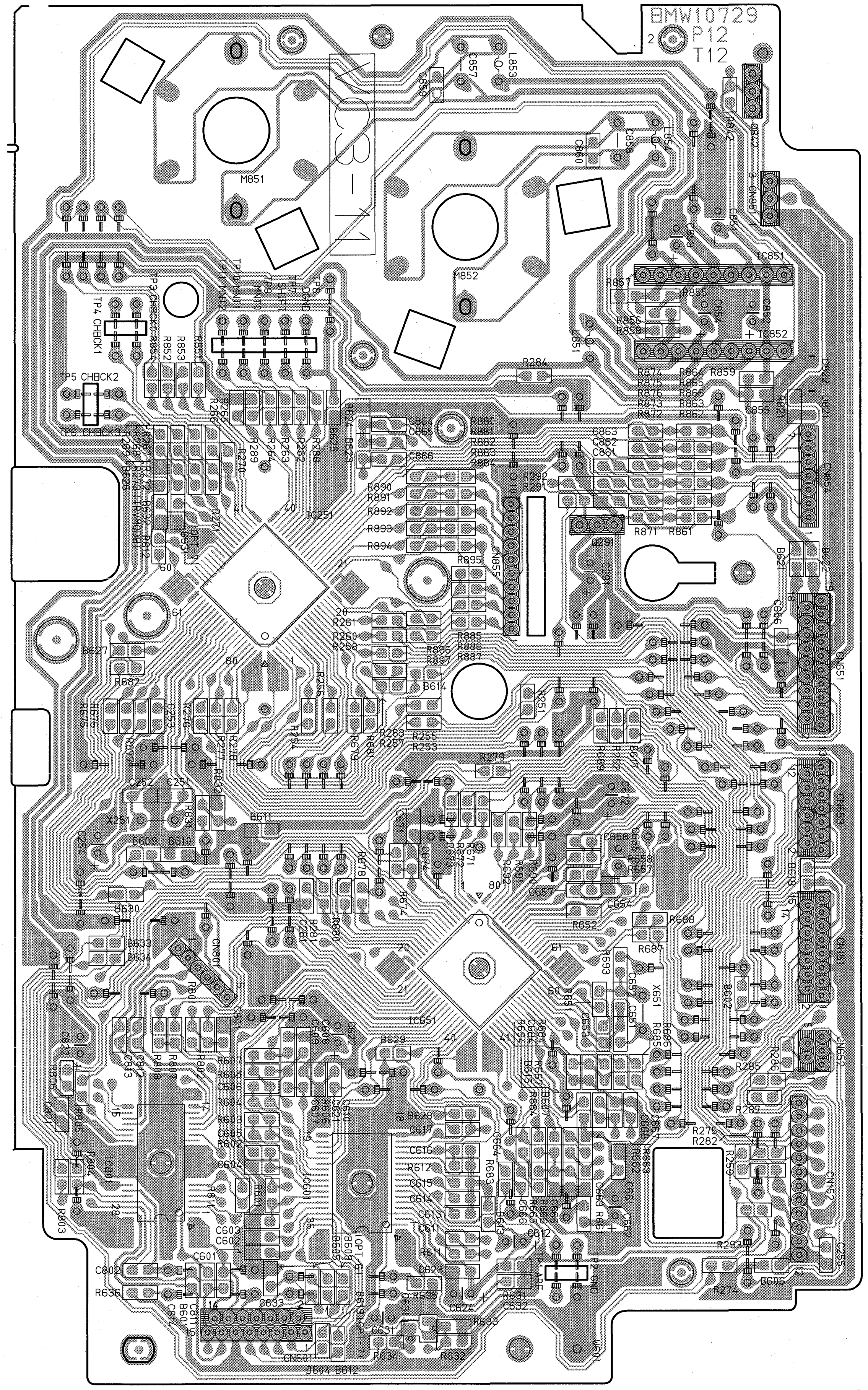
■ CD Tray section switch board


T01
P01
VMW1378 A

■ Can switch board


VMW1378 B
P01
T01

■ CD Servo control board


BMW10729
P12
T12
M851
M852
IC851
IC852
IC251
IC651
IC601
CN851
CN852
CN854
CN651
CN653
CN151
CN652
CN601
TP4 CHECK1
TP3 CHECK0
TP5 CHECK2
TP6 CHECK3
X251
X651

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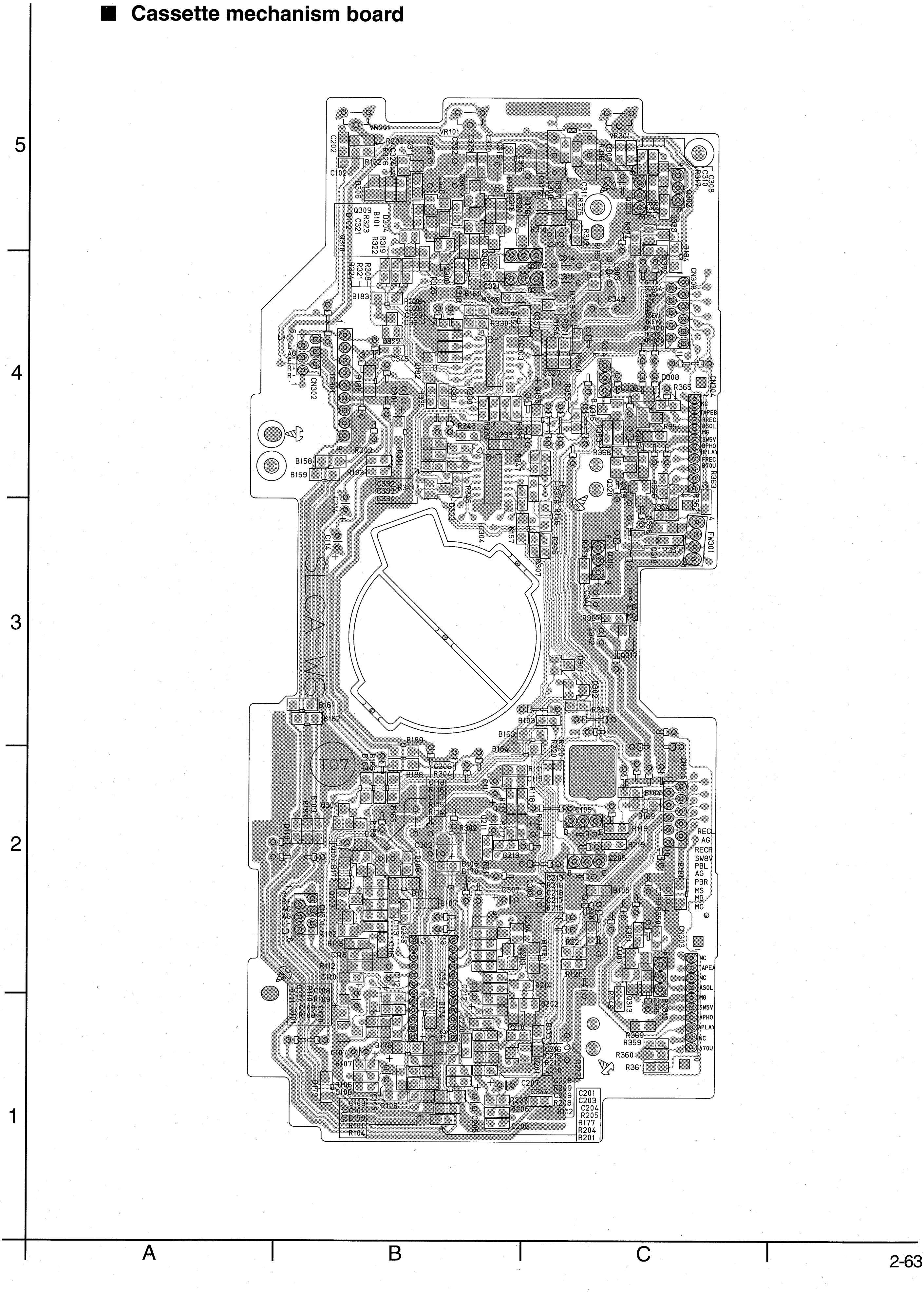
■ Cassette mechanism board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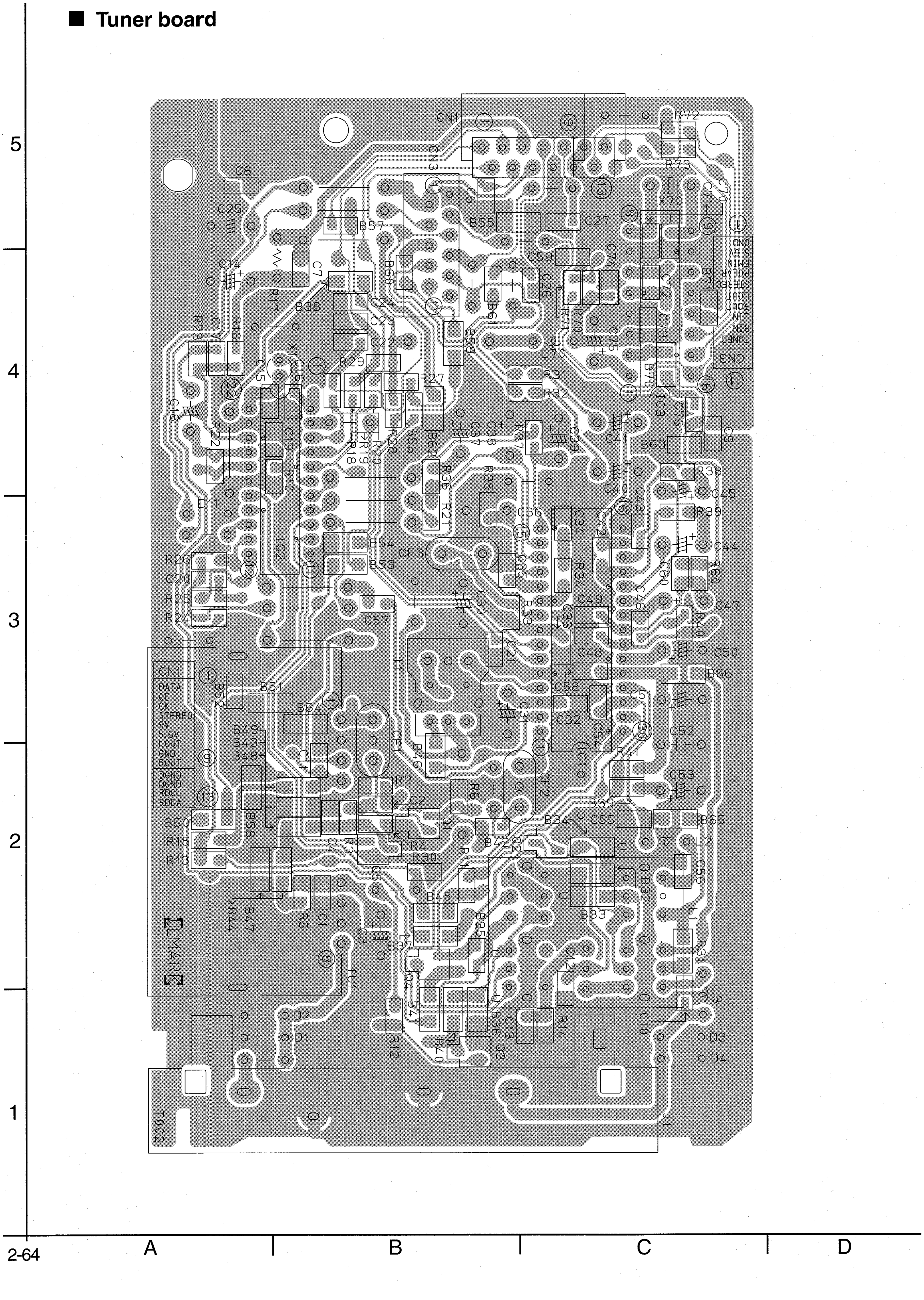
A
B
C
CN301
CN302
CN303
CN304
CN305
CN306
FW301
IC301
IC302
IC303
IC304
VR101
VR201
VR301
SL-CA-W6
T07

■ Tuner board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CN1
CN3
CN2
R72
R73
X70
C70
C71
C8
C25
C6
B55
C27
B57
C59
C74
C14
C7
B60
C26
C72
B71
R17
B38
C24
B61
R71
R70
C75
C23
C22
C73
B59
L70
B70
R23
C17
R16
X1
C16
C15
R29
R27
R31
R32
C18
C3
C76
C9
R22
C19
R19
R20
R28
B56
B62
C37
C38
R37
C39
C41
B63
R18
R10
R36
R35
R38
C40
C43
C45
D11
R21
C36
C34
C42
R39
IC2
B54
CF3
C35
C44
R26
B53
R34
C60
R60
C20
R25
C30
R33
C49
C46
C47
R24
C57
C33
R40
C21
C48
C50
T1
C58
B66
DATA
CE
CK
STEREO
9V
5.6V
LOUT
GND
ROUT
DGND
DGND
RDCL
RDDA
B52
B51
B64
C31
C51
C32
C54
C52
B49
B43
B48
CF1
C1
B46
IC1
R41
R2
R6
CF2
C53
C2
B39
B50
B58
Q1
B34
C55
B65
R15
R4
B42
Q2
L2
R13
C4
R3
R30
R11
C56
Q5
B32
B47
B44
R5
C1
B45
B33
L1
MARK
C3
B35
L7
B37
C12
B31
TU1
L3
Q4
D2
B4
B36
C13
R14
C10
D1
R12
B40
Q3
D3
D4
T002
J1

PARTS LIST

[MX-J900]
[MX-J950R]

* All printed circuit boards and its assemblies are not available as service parts.

MX-J900

Area suffix
J ---------------------------- U.S.A.
C ------------------------- Canada

CA-MXJ900/SP-MXJ900

Area suffix
U -------------------- Other Areas

CA-MXJ950R/SP-MXJ950R

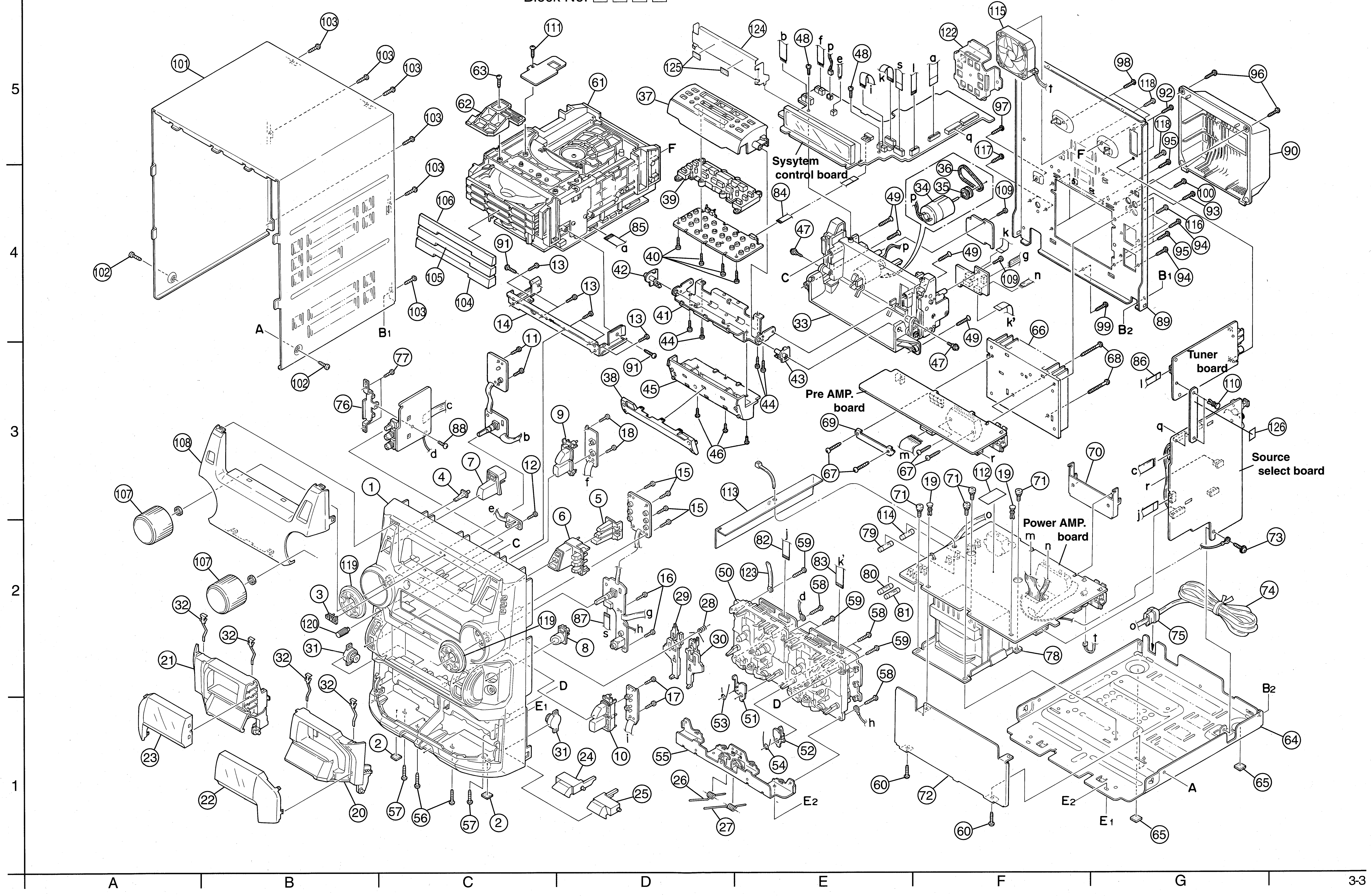
Area suffix
B ------------------------------ U.K.
E ----------- Continental Europe
EN ------------ Northern Europe

- Contents -

Exploded view of general assembly and parts list -- 3-3
CD changer mechanism assembly and parts list -- 3-6
CD mechanism assembly and parts list -- 3-8
Cassette mechanism assembly and parts list -- 3-9
Electrical parts list -- 3-14
Packing materials and accessories parts list -- 3-30

Exploded view of general assembly and parts list

Block No. M 1 M M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101
103
103
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61
125
i
k
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j
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62
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97
118
92
t
103
F
q
118
95
90
Sysytem control board
117
F
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100
103
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109
93
106
84
49
p
116
85
a
47
p
k
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42
C
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102
105
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109
n
B1
94
104
41
33
k'
14
13
103
A
B1
44
99
B2
89
66
11
49
47
68
91
43
86
Tuner board
77
38
45
Pre AMP. board
110
102
44
76
c
9
46
69
q
126
88
b
18
r
d
m
108
f
67
Source select board
7
12
15
67
70
c
4
113
107
1
e
71
19
112
19
71
r
c
6
5
15
114
j
71
82
59
Power AMP. board
79
m
n
o
73
119
107
50
123
83
k'
3
80
16
d
58
74
81
29
28
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120
119
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E1
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B2
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72
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A
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E2
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E2
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E1
65

■Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	GV10027-002A	FRONT PANEL	1	CA-MXJ900	
		GV10027-001A	FRONT PANEL	1	MX-J900	
		GV10027-003A	FRONT PANEL	1	CA-MXJ950R	
	2	E75896-001	FELT SPACER	2		
	3	GV40077-001A	JVC BADGE	1		
	4	GV40080-001A	STANDBY INDICATOR	1		
	5	GV20056-001A	CD EJECT BUTTON	1		
	6	GV20057-001A	CD BUTTON	1		
	7	GV30087-001A	POWER BUTTON	1	CA-MXJ900/CA-MXJ950R	
		GV30087-002A	POWER BUTTON	1	MX-J900	
	8	GV30088-001A	PUSH BUTTON	1		
	9	GV20049-003A	SOURCE BUTTON(A)	1	CD/TAPE MARK	
	10	GV20050-002A	SOURCE BUTTON(B)	1	TUNER/AUX MARK	
	11	QYSDSF2608Z	SCREW	2	POWER BOARD	
	12	QYSDSF2608Z	SCREW	1	REMOTE SENSOR	
	13	QYSDSF2608Z	SCREW	6	STY.BKT+F.PANEL	
	14	GV30082-001A	STAY BRACKET	1		
	15	QYSDSF2608Z	SCREW	4	CD SWITCH BOARD	
	16	QYSDSF2608Z	SCREW	2	VOLUME BOARD	
	17	QYSDSF2608Z	SCREW	2	CD/TAPE S.BOARD	
	18	QYSDSF2608Z	SCREW	2	TUNER/AUX S.BOARD	
	19	FMYH4004-001	PLASTIC RIVET	2	T.SHLD./ P.BOARD	
	20	GV10029-001A	CASS.HOLDER(L)	1		
	21	GV10030-001A	CASS.HOLDER(R)	1		
	22	GV20053-001A	CASS LENS(L)	1		
	23	GV20054-001A	CASS LENS(R)	1		
	24	GV30077-001A	EJECT BUTTON(A)	1		
	25	GV30078-001A	EJECT BUTTON(B)	1		
	26	FMKW4009-001	HOLDER SPRING(A)	1		
	27	FMKW4010-001	HOLDER SPRING(B)	1		
	28	FMKW4011-001	SPRING	1	FOR EJECT LEVER	
	29	FMKS3002-003	EJECT LEVER(A)	1		
	30	FMKS3003-003	EJECT LEVER(B)	1		
	31	GV40034-001A	DAMPER ASSY	2		
	32	VKY4180-401	CASSETTE SPRING	4		
	33	GV10014-005A	CASE ASSY	1		
	34	MXN-13FB12F	DC MOTOR	1		
	35	GV40022-001A	MOTOR PULLEY	1		
	36	GV30038-001A	CAPSTAN BELT	1		
	37	GV30086-002A	MOVING PANEL(A)	1	MX-J900/CA-MXJ900	
		GV30086-005A	MOVING PANEL(A)	1	CA-MXJ950R	
	38	GV30089-003A	PANEL PLATE	1		
	39	GV20058-002A	CONTROL BUTTON	1	CA-MXJ950R	
		GV20058-001A	CONTROL BUTTON	1	MX-J900/CA-MXJ900	
	40	QYSDSF2608Z	SCREW	4	S.BRD/M.PNL ASS'Y	
	41	GV30042-002A	PANEL BRACKET	1		
	42	GV40028-001A	PANEL HOLDER(L)	1		
	43	GV40028-002A	PANEL HOLDER(R)	1		
	44	QYSDSF2608Z	SCREW	4	PNL BKT/M.PNL A	
	45	GV20059-001A	MOVING PANEL(B)	1		
	46	QYSBST2606Z	T.SCREW	3	M.PNL B/PNL BKT	
	47	VKZ4341-204	SPECIAL SCREW	2	ARM CASE/PNL BKT	

■Parts list (General assembly)

Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	48	QYSDSF2608Z	SCREW	2	FL BOARD / CASE	
	49	QYSSSF3012Z	TAP SCREW	4	MOVING PNL./F.P	
	50	---------------	CASSETTE MECHA	1		
	51	FMKL4012-004	EJECT SAFETY(A)	1		
	52	FMKL4013-001	EJECT SAFETY(B)	1		
	53	FMKW4007-001	SPRING (A)	1	EJECT SAFETY A	
	54	FMKW4008-001	SPRING (B)	1	EJECT SAFETY B	
	55	GV20055-001A	HOLDER BRACKET	1		
	56	QYSBSG3010E	T.SCREW	2	F.P.TO H.BRKT.	
	57	QYSBSG3010E	T.SCREW	2	F.P.TO CHS.BASE	
	58	QYSBSG3010Z	T.SCREW	4	MECHA & H.BRKT.	
	59	QYSBSF3012Z	SCREW	4	MECHA & F.PANEL	
	60	QYSBSG3010E	T.SCREW	2	T.SHLD/ C.BASE	
	61	---------------	CD CHANGER MECH	1		
	62	E309662-001SM	DISC STOPPER	1		
	63	QYSBSF3008Z	SCREW	1	FOR DISC STOPPE	
	64	GV10025-001A	CHASSIS BASE	1		
	65	E75896-006	FELT SPACER	2	CHAS.BASE FOOT	
	66	GV30083-001A	HEAT SINK	1		
	67	QYSBSG3014E	T.SCREW	4	L.SPRING/ STK I	
	68	QYSBSG3020E	TAP SCREW	2	FOR IC BKT.	
	69	GV40029-001A	LEAF SPRING	1		
	70	GV30080-001A	IC BRACKET	1		
	71	QYSDSTL4008Z	SPECIAL SCREW	4		
	72	GV30079-001A	TRANS.SHIELD	1		
	73	QYSBSGG3008E	T.SCREW	1	M.BOARD /C.BASE	
⚠	74	QMPK090-205-JN	POWER CORD	1		U,E,EN
⚠		QMPD250-200-JN	POWER CORD	1		J,C
⚠		QMPN090-200-JC	POWER CORD	1		B
	75	QZW0033-001	STRAIN RELIEF	1		
	76	GV40082-001A	MIC BRACKET	1		U
	77	QYSDSF2608Z	SCREW	2	MIC BKT.+F.PANE	U
⚠	78	QQT0278-001	POWER TRANSFORMER	1	T001	J,C
⚠		QQT0278-002	POWER TRANSFORMER	1	T001	B,E,EN
⚠		QQT0278-003	POWER TRANSFORMER	1	T001	U
⚠	79	QMF51E2-2R0-J1	FUSE	1	F001	B
⚠		QMF51E2-4R0-J1	FUSE	1	F001	U
⚠		QMF51U1-5R0-J1	FUSE	1	F001	J,C
⚠	80	QMF51E2-3R15-J1	FUSE	1	F101	U,B,E,EN
⚠		QMF51U1-6R0-J1	FUSE	1	F101	J,C,
⚠	81	QMF51U1-6R0-J1	FUSE	1	F102	J,C
⚠		QMF51E2-3R15-J1	FUSE	1	F102	U,B,E,EN
	82	QUQ412-1028CJ	FFC WIRE(FC315)	1	SLC TO FMC	
	83	QUQ412-1112DJ	FFC WIRE(FC869)	1	SLC TO FMB	
	84	QUQ610-0915BJ	FFC WIRE(FC879)	1	ROL.P TO FMB	
	85	QUQ110-1908BJ	CARD WIRE(FC868)	1	VC3 TO FMB	
	86	QUQ412-1317CJ	FFC WIRE(FC865)	1	TUNER TO FMB	B,E,EN
		QUQ412-0917CJ	FFC WIRE(FC865)	1	TUNER TO FMB	J,C,U
	87	QUQ412-1112DJ	FFC WIRE(FC880)	1	MAIN VR TO FMB	
	88	QYSBST3006Z	T.SCREW	1	MIC BRD./MIC.BK	U
	89	GV10026-021A	REAR PANEL	1		J
		GV10026-026A	REAR PANEL	1		B,E,EN

■Parts list (General assembly)

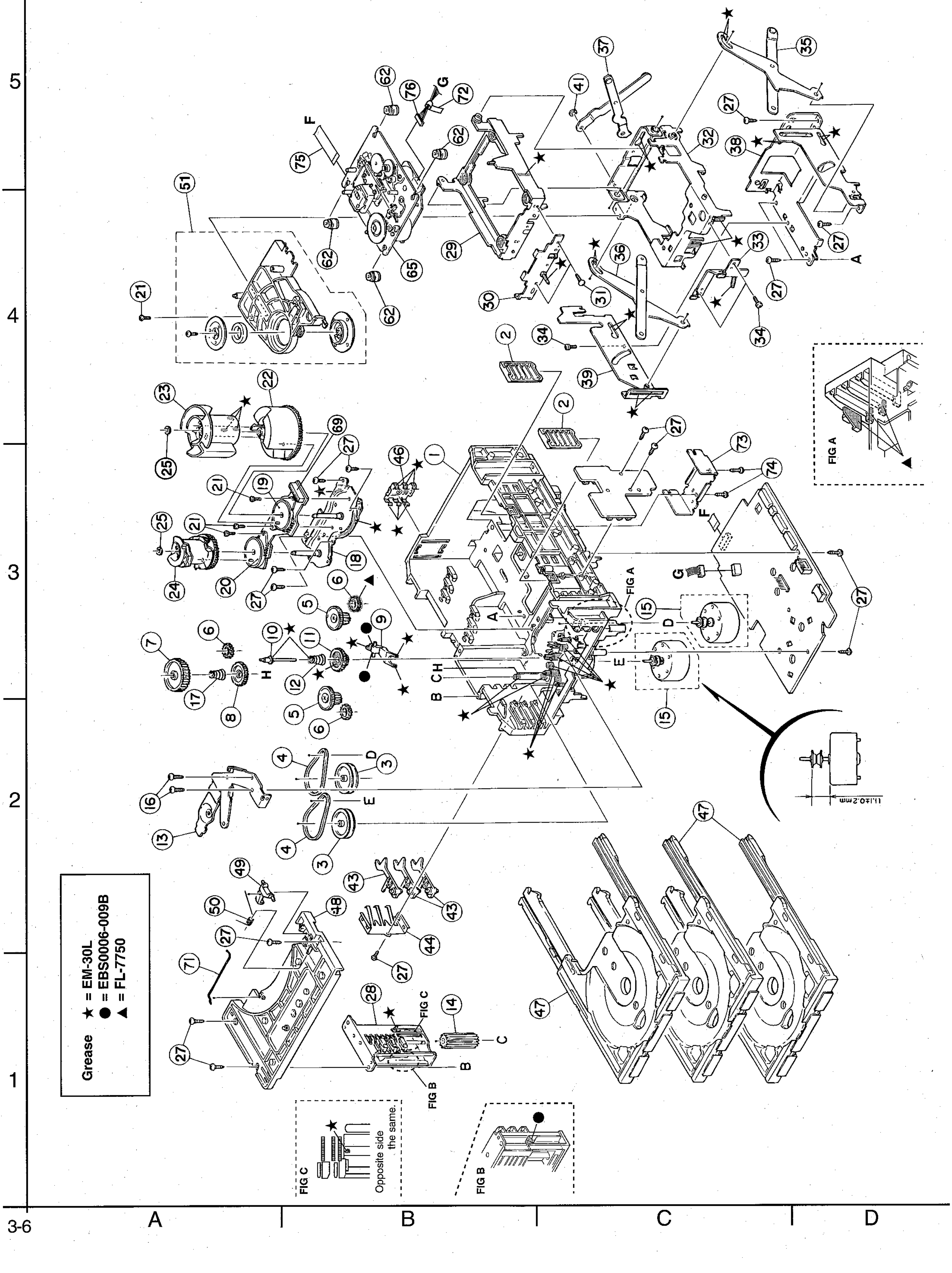
Block No. M1MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	89	GV10026-020A	REAR PANEL	1		C
		GV10026-024A	REAR PANEL	1		U
	90	E207356-002SM	REAR COVER	1		
	91	QYSBSG3010Z	T.SCREW	2	VC3 / STAY BKT.	
	92	QYSBSGY3008E	SPECIAL SCREW	2	ANTENA/R.PANEL	
	93	QYSBSGY3008E	SPECIAL SCREW	1	AUX TEM/R.PANEL	
	94	QYSBSGY3008E	SPECIAL SCREW	2	SPK TEM./R.PANE	
	95	QYSBSGY3008E	SPECIAL SCREW	4	H.SINK/ R.PANEL	
	96	QYSBSGY3008E	SPECIAL SCREW	2	R.COVER/R PANEL	
	97	QYSBSGY3008E	SPECIAL SCREW	1	GROUND /R.PANEL	
	98	QYSBSGY3008E	SPECIAL SCREW	2	VC3 / REAR PANE	
	99	QYSBSGY3008E	SPECIAL SCREW	1	R.PANEL / C.BAS	
	100	QYSBSGY3008E	SPECIAL SCREW	1	OPTICAL /R.PANE	
	101	GV10024-001A/S/	METAL COVER	1		
	102	QYSDSG3006M	T.SCREW	2	M.COVER+C.BASE	
	103	QYSBSGY3008E	SPECIAL SCREW	6	M.COVER+R.PANEL	
	104	GV30074-003A	CD FITTING	1	DISC 1	
	105	GV30075-003A	CD FITTING	1	DISC 2	
	106	GV30076-003A	CD FITTING	1	DISC 3	
	107	GV30084-001A	KNOB	2	S.WOOFER & VOL.	
	108	GV10028-006A	WINDOW SCREEW	1	MX-J900/CA-MXJ900	
		GV10028-008A	WINDOW SCREEN	1	CA-MXJ950R	
	109	QYSDSF2608Z	SCREW	2	WIRE &MOTOR STOPPER	
	110	FMYH4004-001	PLASTIC RIVET	2	TUNER BRD.HOLDER	
	111	QYSBSF3008Z	TAPPING SCREW	1	FOR CD BOARD	J,C
	112	E75804-001	CAUTION LABEL	1		C
	113	GV30104-001A	PROTECT SHEET	1		
⚠	114	QMF51E2-2R0-J1	FUSE	1	F003	U
	115	QAR0124-001	FAN MOTOR	1	F703	
	116	QYSBSGY3008E	SPECIAL SCREW	2	S.WOOFER/R.PANE	
	117	QYSBSF3012E	SPECIAL SCREW	2	VOL.SEL/R.P.	U
	118	QYSBSGY3008E	SPECIAL SCREW	2	FAN BKT./R.PANE	
	119	GV30085-001A	INDICATOR	2		
	120	GV40083-001A	MIC VOL.KNOB	1		U
	122	GV30081-001A	FAN BRACKET	1		
	123	VKZ4001-110S	WIRE HOLDER	1		
	124	GV30032-001A	FL HOLDER	1		
	125	E3400-439	FELT SPACER	2		
	126	GV40123-001A	FELT SPACER	1		

CD changer mechanism assembly and parts list

VC3-21M

Block No. M 2 M M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76
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B
C
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F
G
H
CH
FIG A
FIG B
FIG C
Opposite side the same.
11.1±0.2mm

Grease
★ = EM-30L
● = EBS0006-009B
▲ = FL-7750

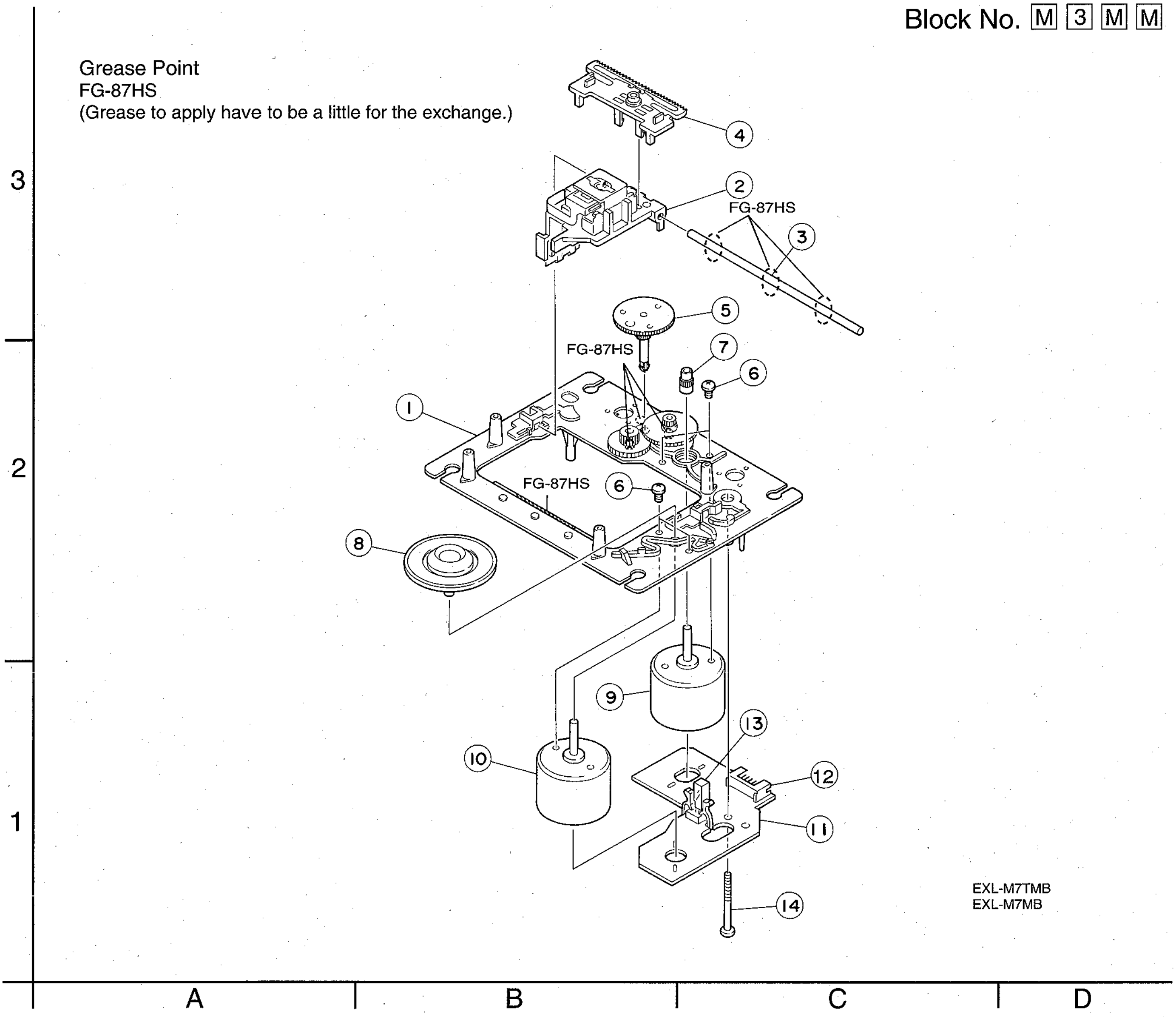
■Parts list (CD changer mechanism)

Block No. M2MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	VKS1144-003	CHASSIS	1		
	2	VKS3698-003	TRAY GUIDE	2		
	3	VKS5532-003	PULLEY GEAR	2		
	4	VKB3000-164	BELT	2		
	5	VKS5505-003	GEAR B	2		
	6	VKS5506-002	GEAR C	3		
	7	VKS5507-002	CROSS GEAR U	1		
	8	VKS5508-002	CROSS GEAR L	1		
	9	VKS5510-003	SELECT LEVER	1		
	10	VKH5769-001	S.G.SHAFT	1		
	11	VKS5511-002	SELECT GEAR	1		
	12	VKW5155-003	COMP.SPRING	1	FOR SELECT GEAR	
	13	VKM3846-002	GEAR BRACKET	1		
	14	VKS5509-002MM	CYLINDER GEAR	1		
	15	MSN5D257A-SA2	D.C.MOTOR ASS'Y	2		
	16	QYSPSPD2616Z	SCREW	2	FOR MOTOR	
	17	LV40612-001A	COMP.SPRING	1		
	18	VKM3825-00AMM	C.G.BASE ASS'Y	1		
	19	VKZ3172-00ASS	CAM SW. R ASS'Y	1		
	20	VKZ3173-00ASS	CAM SW. L ASS'Y	1		
	21	QYSPST2606Z	SCREW	4		
	22	VKS2263-002MM	CAM R1	1		
	23	VKS2264-002MM	CAM R2	1		
	24	VKS2265-002MM	CAM GEAR L	1		
	25	WDL316050MM	SLIT WASHER	2		
	27	QYSBSF2608Z	T.SCREW	16		
	28	VKS3702-00FMM	DRIVE UNIT	1		
	29	VKS2247-004	MECHA HOLDER A	1		
	30	VKL7767-00B	BRACKET ASS'Y	1		
	31	QYSBSF2606Z	SCREW	2	FOR BRACKET	
	32	VKM3860-00A	M.HOLDER B AS'Y	1		
	33	VKL7802-00C	M.HOLDER C AS'Y	1		
	34	QYSDST2604Z	SCREW	3		
	35	VKL7810-00A	LIFTER ASS'Y R	1		
	36	VKL7811-00A	LIFTER ASS'Y L	1		
	37	VKL7812-00A	LIFTER ASS'Y H	1		
	38	VKL2732-002	LIFTER BASE	1		
	39	VKM3857-001	LIFTER BRACKET	1		
	41	WDL266035-2	SLIT WASHER	1		
	43	VKS5514-002MM	LOCK LEVER	3		
	44	VKY3133-002MM	RETURN SPRING	1		
	46	VKY3134-003MM	CLICK SPRING	1		
	47	VKS2252-00E	TRAY ASS'Y	3		
	48	VKS2250-003	TOP BRACKET	1		
	49	VKS5515-002	S.TRAY STOPPER	1		
	50	VKW5156-004	TORSION SPRING	1		
	51	VKS3703-00G	CLAMPER ASS'Y	1		
	62	LV40761-003A	INSULATOR	4		
	65	---------------	CD MECHA	1		
	69	QGB2012J1-10	CONNECTOR	1		
	71	VKW5187-001	ROD	1		
	72	VYSA1R2-033	SPACER	1	FOR EWS176-008	
	73	LE30611-001A	C.B HOLDER	1	FOR CD CB	
	74	QYSBSF3008Z	SCREW	2	FOR HOLDER	
	75	QUQ610-1509AJ	CARD WIRE	1	TRAVERSE 15	
	76	EWS176-008	FLAT WIRE	1	TRAVERSE 6	

CD mechanism assembly and parts list

Block No. M 3 M M


Grease Point
FG-87HS
(Grease to apply have to be a little for the exchange.)
3
2
1
A
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FG-87HS
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FG-87HS
7
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FG-87HS
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14
EXL-M7TMB
EXL-M7MB

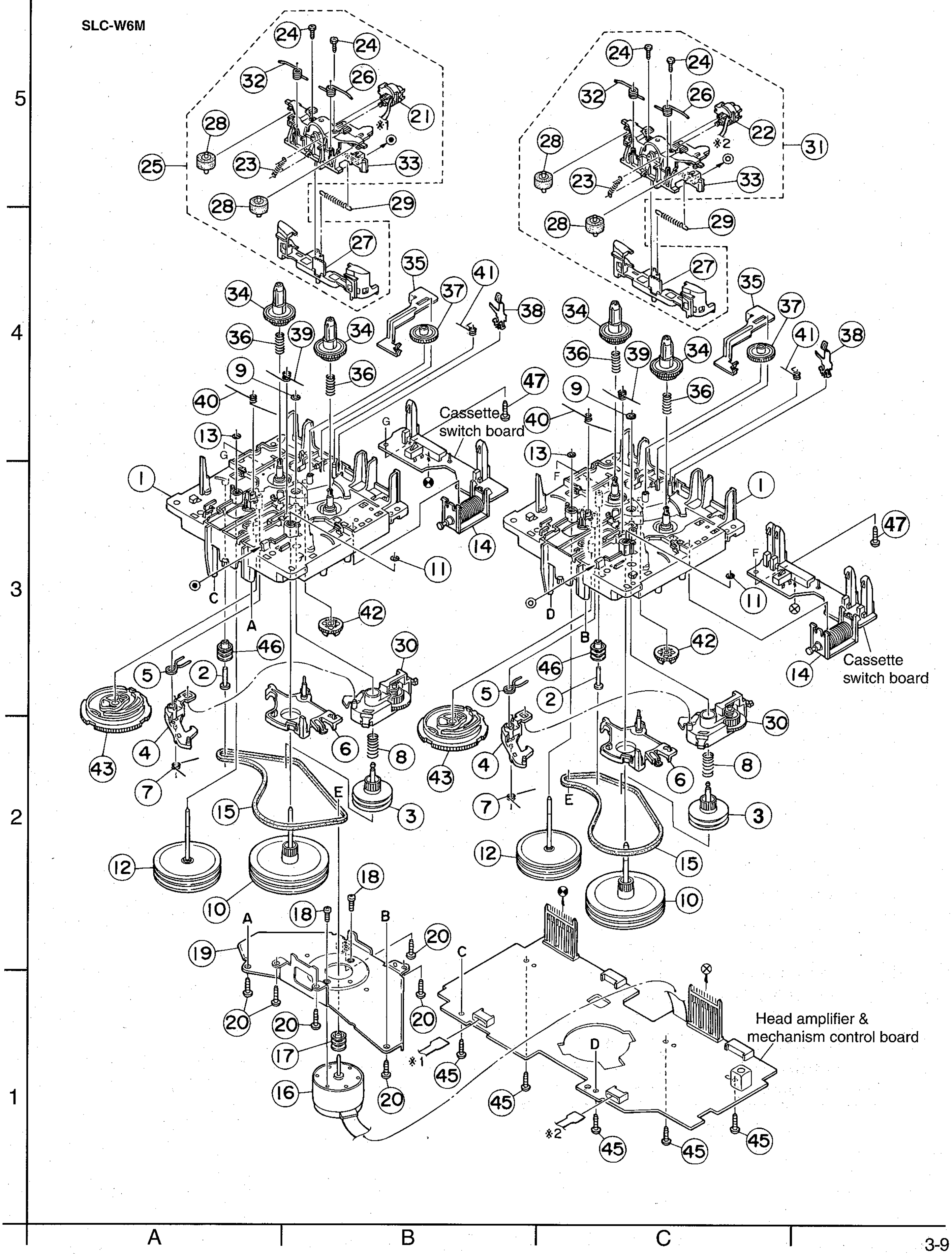
■ Parts list (CD mechanism)

Block No. M3MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	E102731-221SM	MECHA BASE	1		
	2	OPTIMA-7B	OPTICAL PICK UP	1		
	3	E406777-002SM	CD SHAFT	1		
	4	LV31002-001A	CD RACK	1		
	5	E307745-441SM	MECHA GEAR	1		
	6	QYSDSP2003N	SCREW	4		
	7	E406750-442SM	PINION GEAR	1		
	8	EPB-001PK	TURN TABLE	1	SINGLE CD	
		EPB309173PKA	TURN TABLE	1	CHANGER CD	
	9	E406784-001	FEED MOTOR	1		
	10	QAR0130-001	SPPINDLE MOTOR	1		
	11	EMW10190-441	P.C.BOARD	1		
	12	QGA2001F1-06	6P PLUG ASSY	1		
	13	QSW0506-001	LEAF SWITCH	1		
	14	E75832-221SS	SPECIAL SCREW	1		

Cassette mechanism assembly and parts list

Block No. M 4 M M


SLC-W6M
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Cassette switch board
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G
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*1
*2
Head amplifier & mechanism control board

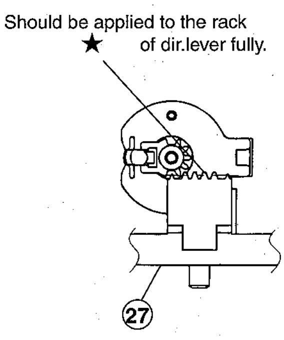
■Parts list (Cassette mechanism)

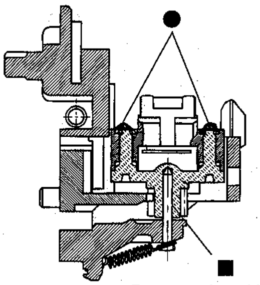
Block No. M4MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	1	VKS1165-00H	CHASSIS B.ASS'Y	2		
	2	VKH5786-002	SHAFT	2		
	3	VKS5603-00D	MAIN PULLEY ASY	2		
	4	VKS3785-001MM	FR ARM	2		
	5	VKW5284-002	SWING SPRING	2		
	6	VKS2278-003	TRIGGER ARM	2		
	7	VKW5301-001	FR SPRING	2		
	8	VKW5266-001	ELEVATOR SPRING	2		
	9	WDL214025	WASHER	2		
	10	VKF3205-00B	F.WHEEL ASSY(R)	2		
	11	WDL183425	SLIT WASHER	2		
	12	VKF3207-00B	F.WHEEL ASSY(L)	2		
	13	WDL173525-6	SLIT WASHER	2		
	14	VKZ3174-00A	DC SOLENOID	2		
	15	VKB3000-182	CAPSTAN BELT(B)	2		
	16	MSI-5U2LWA	D.C.MOTOR ASS'Y	1		
	17	VKR4761-001	MOTOR PULLEY	1		
	18	QYSPSP2604Z	SCREW	2		
	19	VKM3907-001	JOINT BRACKET	1		
	20	QYSBSF2608Z	T.SCREW	6		
	21	LV41090-001A	P.B.HEAD	1		
	22	LV41089-001A	R/P&E HEAD	1		
	23	VKW5302-001	HEAD SPRING	2		
	24	VKZ4730-001	SPECIAL SCREW	4		
	25	VKS2279-00D	HEAD MOUNT ASSY	1		
	26	VKW5299-002	PIN ROL.SP.(R)	2		
	27	VKS2277-005	DIRECTION LEVER	2		
	28	VKP4233-00A	PINCH ROL. ASSY	4		
	29	VKW5285-001	RETURN SPRING	2		
	30	VKS3786-00G	CLUTCH ASS'Y	2		
	31	VKS2275-00D	HEAD MOUNT ASSY	1		
	32	VKW5300-002	PIN ROL.SP.(L)	2		
	33	VKS1167-001	HEAD MOUNT BASE	2		
	34	VKS2274-002	REEL GEAR	4		
	35	VKM3906-003	PLAY SW LEVER	2		
	36	VKW5286-002	B.T. SPRING	4		
	37	VKS5559-001	PLAY IDLE GEAR	2		
	38	VKY3149-002	CASSETTE SP.	2		
	39	VKW5279-001	HEAD BASE SP(R)	2		
	40	VKW5280-001	HEAD BASE SP(L)	2		
	41	VKW5296-001	EARTH SPRING	2		
	42	VKS5597-00A	BLIND	2		
	43	VKS1166-003	CONTROL CAM	2		
	45	QYSBSF2608Z	T.SCREW	5	FOR P.W.B.	
	46	VKR4749-002	IDLE PULLEY	2		
	47	QYSBSF2006Z	SCREW	2		

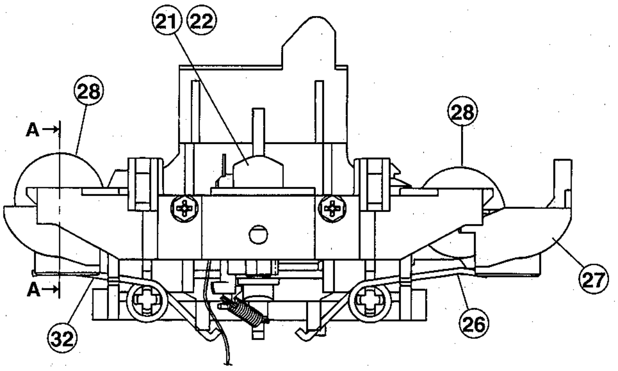
Grease point

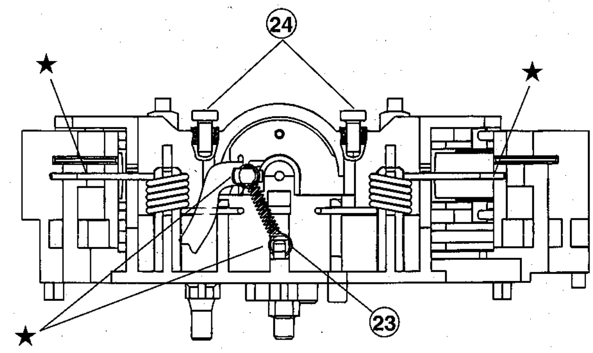
Grease
★ =JC-525
■ =FL-7750
▲ =UD-24
△ =UD-24H2
● =LX-1349B
◎ =MOBIL-1


★ Should be applied to the rack of dir.lever fully.

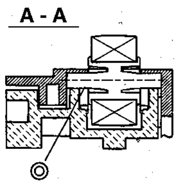


Between head holder and shaft.

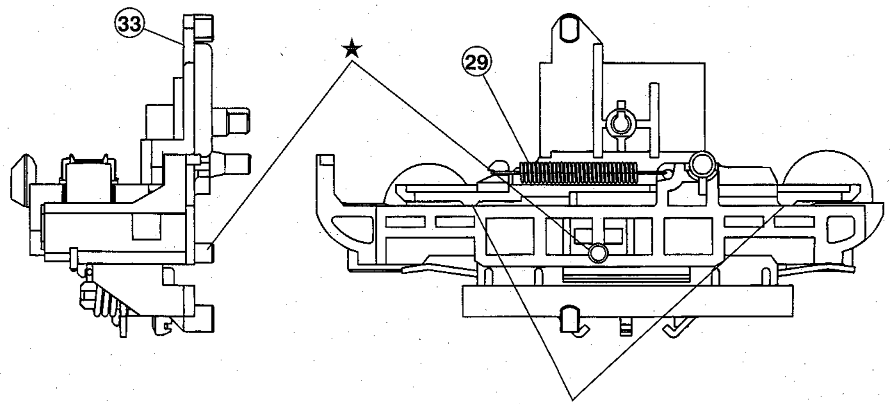




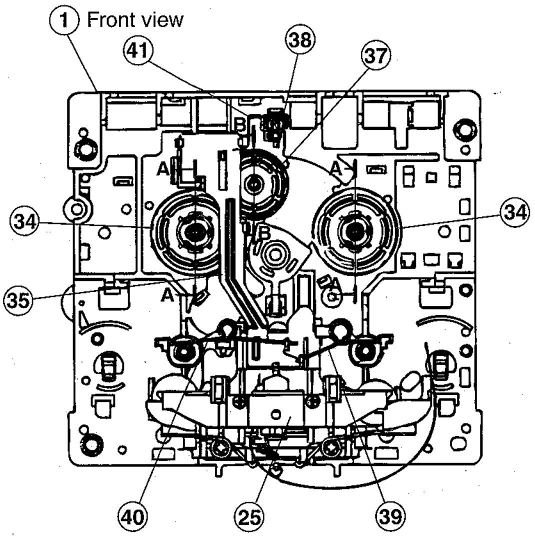
Between head holder and spring's hook.



Apply oil to the shaft of pinch roller on both sides before assembly.



★ Between direction lever and head mount base.


① Front view
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B
A
A
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㉞
B
A
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A
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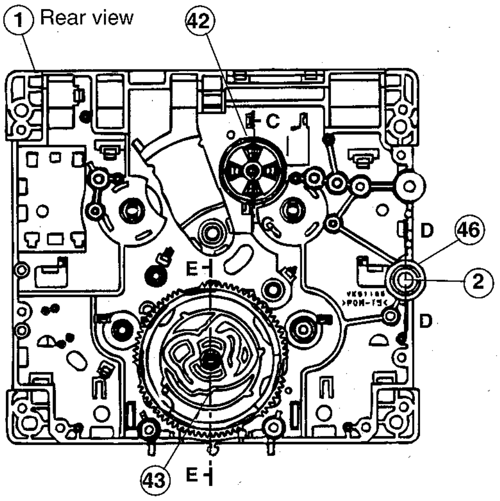
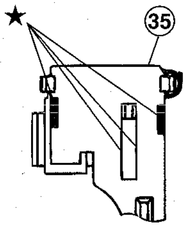
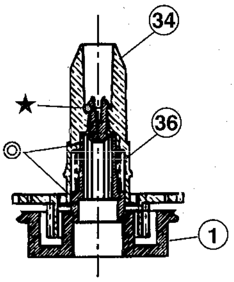
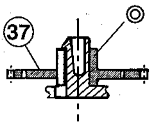

① Rear view
㊷
C
D
㊻
②
E
D
㊸
E

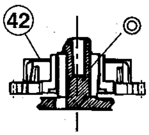




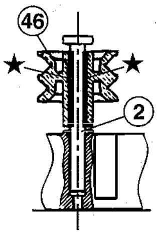
A - A (2/1, 2 places)



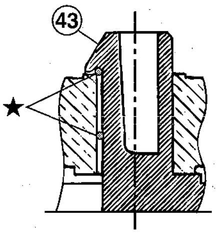
B - B (2/1)



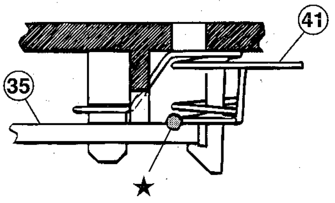
C - C (2/1)

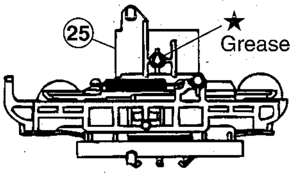


D - D (2/1)

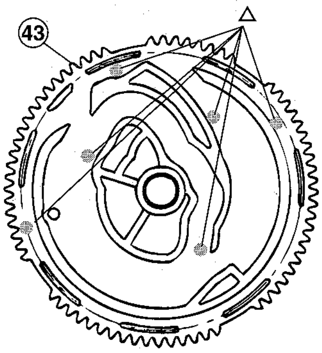


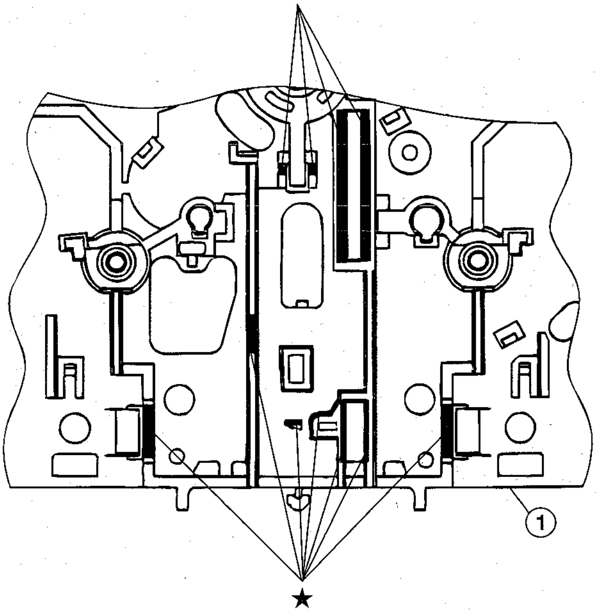
E - E (5/1)



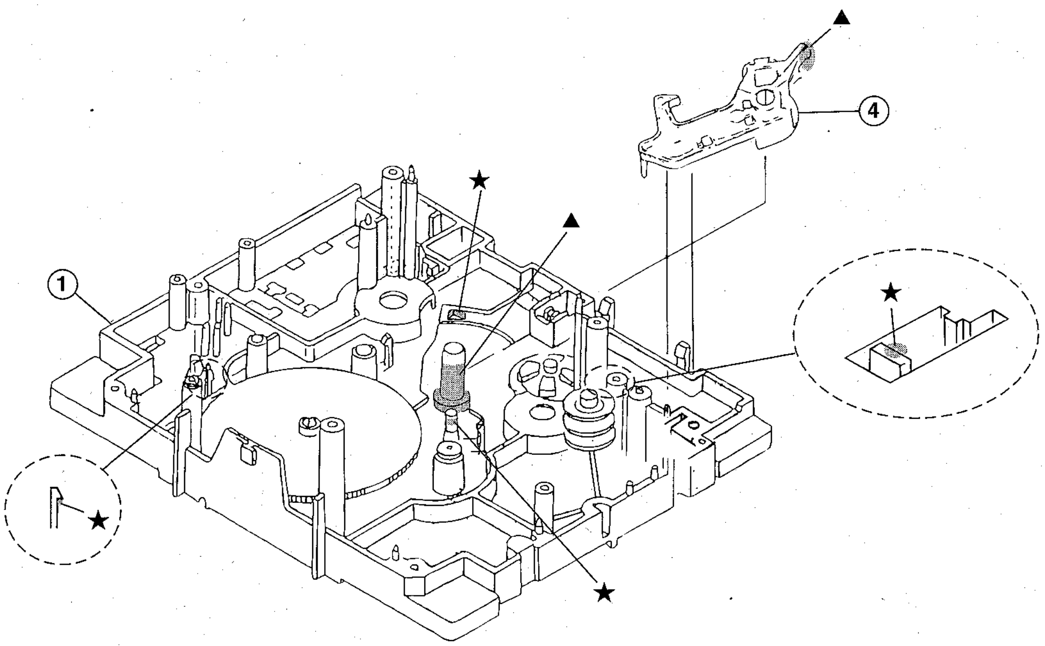


Grease applying on boss.





5



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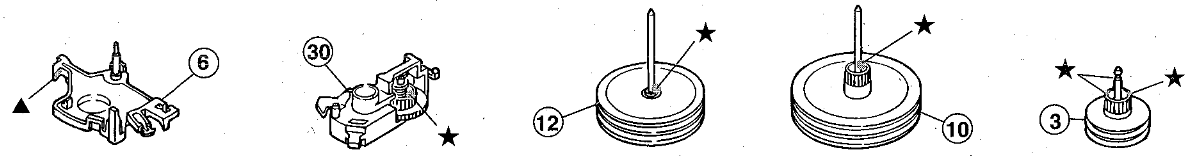
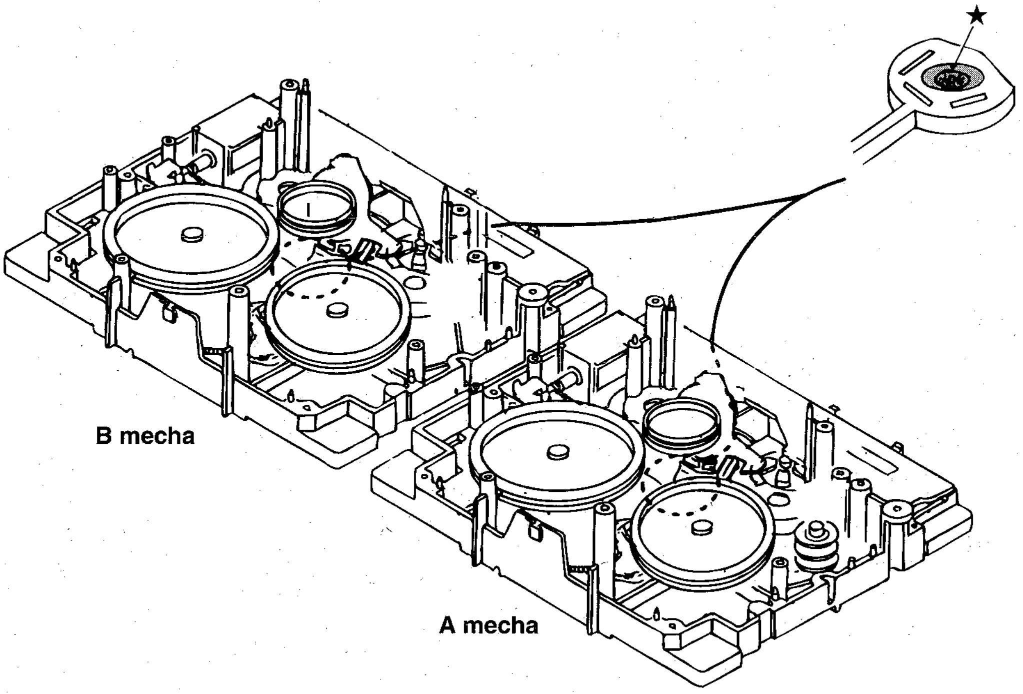
3



2


★
B mecha
A mecha

1

A | B | C

Electrical parts list

■ Electrical parts list (Power AMP. & Source select board) Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	C 201	QFKC2EK-104	M CAPACITOR	.10MF 10% 250V	
	C 202	QFKC2EK-104	M CAPACITOR	.10MF 10% 250V	
	C 203	QFKC2EK-104	M CAPACITOR	.10MF 10% 250V	
	C 204	EETB1JM-478JC	E CAPACITOR		
	C 205	EETB1JM-478JC	E CAPACITOR		
	C 211	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 212	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 213	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 214	EETB1VM-228JC	E CAPACITOR		
	C 215	EETB1VM-228JC	E CAPACITOR		
	C 216	QETN1VM-107Z	E CAPACITOR	100MF 20% 35V	
	C 217	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 218	EETC1HM-226ZJC	E CAPACITOR		
	C 219	QDYB1CM-103Y	C CAPACITOR		
	C 220	EETC1HM-226ZJC	E CAPACITOR		
	C 221	EETC1HM-475ZJC	E CAPACITOR		
	C 222	EETC1HM-475ZJC	E CAPACITOR		
	C 223	EETC1HM-225ZJC	E CAPACITOR		
	C 233	QFVJ1HJ-224Z	CAPACITOR	.22MF 5% 50V	U
	C 233	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	B,E,EN
	C 233	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	C,J
	C 253	QETM1EM-338	E CAPACITOR	3300MF 20% 25V	
	C 401	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	B,E,EN
	C 402	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	B,E,EN
	C 403	QETN1AM-477Z	E CAPACITOR	470MF 20% 10V	
	C 404	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 411	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 412	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 413	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	C,J,U
	C 413	QDGB1HK-102Y	C CAPACITOR		B,E,EN
	C 414	QDGB1HK-102Y	C CAPACITOR		B,E,EN
	C 414	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	C,J,U
	C 415	QDGB1HK-102Y	C CAPACITOR		U
	C 415	QDXB1CM-222Y	C CAPACITOR		B,E,EN
	C 415	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	C,J
	C 416	QDXB1CM-222Y	C CAPACITOR		U,B,E,EN
	C 416	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	C,J
	C 426	QDVB1EZ-223Y	C CAPACITOR		
	C 427	EETC1EM-106ZJC	E CAPACITOR		
	C 432	QFLM1HJ-102Z	M CAPACITOR	1000PF 5% 50V	B,E,EN
	C 433	QFLM1HJ-103Z	C CAPACITOR	.010MF 5% 50V	B,E,EN
	C 436	EETC1AM-107ZJC	E CAPACITOR		
	C 437	EETC1EM-106ZJC	E CAPACITOR		
	C 438	QDYB1CM-103Y	C CAPACITOR		
	C 439	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 440	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 441	QTE1V06-106Z	E CAPACITOR		
	C 442	QTE1V06-106Z	E CAPACITOR		
	C 443	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 444	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 445	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 446	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 447	QTE1V06-106Z	E CAPACITOR		
	C 448	QTE1V06-106Z	E CAPACITOR		
	C 449	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 450	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 453	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 454	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 455	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 456	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 457	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C 458	QFLM1HJ-223Z	M CAPACITOR	.022MF 5% 50V	
	C 459	QFLM1HJ-183Z	M CAPACITOR	.018MF 5% 50V	
	C 460	QFLM1HJ-183Z	M CAPACITOR	.018MF 5% 50V	
	C 461	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C 462	QFLM1HJ-562Z	M CAPACITOR	5600PF 5% 50V	
	C 466	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	U
	C 467	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	U
	C 468	EETC1EM-226ZJC	E CAPACITOR		U
	C 469	QFLM1HJ-683Z	M CAPACITOR	.068MF 5% 50V	U
	C 470	QFVJ1HJ-274Z	CAPACITOR	.27MF 5% 50V	U
	C 471	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	U
	C 472	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	U
	C 473	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	U
	C 474	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	U
	C 475	EETC1HM-105ZJC	E CAPACITOR		U
	C 476	QFLM1HJ-682Z	M CAPACITOR	6800PF 5% 50V	
	C 481	QFZ0160-223Z	PP CAPACITOR	.022MF	
	C 482	QFZ0160-223Z	PP CAPACITOR	.022MF	
	C 483	QFZ0160-223Z	PP CAPACITOR	.022MF	
	C 484	QFZ0160-223Z	PP CAPACITOR	.022MF	
	C 485	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 486	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 487	EETC1AM-107ZJC	E CAPACITOR		
	C 488	EETC1CM-476ZJC	E CAPACITOR		
	C 489	EETC1AM-107ZJC	E CAPACITOR		
	C 501	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 502	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 503	QFVJ1HJ-224Z	C CAPACITOR	.22MF 5% 50V	
	C 504	QFLM1HJ-822Z	M CAPACITOR	8200PF 5% 50V	
	C 505	QFVJ1HJ-274Z	CAPACITOR	.27MF 5% 50V	
	C 506	EETC1AM-107ZJC	E CAPACITOR		
	C 507	QFLM1HJ-273Z	M CAPACITOR	.027MF 5% 50V	
	C 508	QFLM1HJ-273Z	M CAPACITOR	.027MF 5% 50V	
	C 509	QETN1HM-475Z	AL E.CAPACITOR	4.7MF 20% 50V	
	C 510	QETN1HM-475Z	E CAPACITOR	4.7MF 20% 50V	
	C 511	EETC1AM-107ZJC	E CAPACITOR		
	C 512	EETC1AM-107ZJC	E CAPACITOR		
	C 513	EETC1AM-107ZJC	E CAPACITOR		
	C 514	QFLM1HJ-473Z	C CAPACITOR	.047MF 5% 50V	
	C 526	EETC1AM-107ZJC	E CAPACITOR		
	C 527	QFLM1HJ-273Z	M CAPACITOR	.027MF 5% 50V	
	C 528	QFLM1HJ-104Z	M CAPACITOR	.10MF 5% 50V	
	C 530	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 531	QFVJ1HJ-274Z	TF CAPACITOR	.27MF 5% 50V	
	C 532	QETN1CM-476Z	AL E.CAPACITOR	47MF 20% 16V	
	C 534	QETN1CM-476Z	AL E.CAPACITOR	47MF 20% 16V	
	C 535	EETC1AM-107ZJC	E CAPACITOR		
	C 556	QETN1EM-106Z	E CAPACITOR	10MF 20% 25V	
	C 571	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	
	C 574	EETC1AM-107ZJC	E CAPACITOR		
	C 575	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	
	C 576	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 577	QETN1CM-476Z	E CAPACITOR	47MF 20% 16V	
	C 578	EETC1HM-105ZJC	E CAPACITOR		
	C 583	EETC1AM-107ZJC	E CAPACITOR		
	C 703	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V	
	C 704	QCBB1HK-471Y	C CAPACITOR	470PF 10% 50V	
	C 705	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 706	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 707	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 708	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 709	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V	
	C 710	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V	
	C 711	QFV72AJ-104Z	M CAPACITOR	.10MF 5% 100V	
	C 712	QFV72AJ-104Z	M CAPACITOR	.10MF 5% 100V	
	C 713	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 713	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	B,E,EN
	C 714	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	B,E,EN
	C 714	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 715	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 715	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	B,E,EN
	C 716	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	B,E,EN
	C 716	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 717	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	J
	C 718	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	J
	C 721	QTE1V06-106Z	E CAPACITOR		
	C 722	QTE1V06-106Z	E CAPACITOR		
	C 723	EETC1AM-107ZJC	E CAPACITOR		
	C 726	EETC1EM-106ZJC	E CAPACITOR		
	C 729	EETC1CM-476ZJC	E CAPACITOR		
	C 730	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 731	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 732	QDXB1CM-222Y	C CAPACITOR		
	C 733	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 734	QDXB1CM-222Y	C CAPACITOR		

■Electrical parts list (Power AMP. & Source select board) Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	C 735	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 736	QFLM1HJ-393Z	M CAPACITOR	.039MF 5% 50V	B,E,EN
	C 737	QFLM1HJ-393Z	M CAPACITOR	.039MF 5% 50V	B,E,EN
	C 739	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	
	C 781	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 790	EETC1EM-476ZJC	E CAPACITOR		
	CN315	QGF1205F1-10	CONNECTOR		
	CN612	QGB2510J1-11	CONNECTOR		
	CN701	QGB2510K2-10	CONNECTOR		
	CN702	QGB2510K2-10	CONNECTOR		
	CN703	QGA2501C1-02	2P CONNECTOR		
	CN711	QGB2510J1-10	CONNECTOR		
	CN712	QGB2510J1-10	CONNECTOR		
	CN870	QGB1214J1-20S	CONNECTOR		
	CN871	QGB1214J1-20S	CONNECTOR		
	CN912	QGD2503F1-05	SOCKET		U
	C1021	QDYB1CM-103Y	C CAPACITOR		U
	C1022	QDGB1HK-102Y	C CAPACITOR		U
	C1023	QDGB1HK-102Y	C CAPACITOR		U
	C1034	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	U
	C1035	EETC1AM-107ZJC	E CAPACITOR		U
	C1036	QCBB1HK-101Y	C CAPACITOR	100PF 10% 50V	U
	C1037	QDYB1CM-103Y	C CAPACITOR		U
	C1038	QDXB1CM-472Y	C CAPACITOR		U
	C1039	QDYB1CM-103Y	C CAPACITOR		U
	C1040	QDXB1CM-332Y	C CAPACITOR		U
	C1041	QDYB1CM-103Y	C CAPACITOR		U
	C1042	EETC1EM-226ZJC	E CAPACITOR		U
	C1043	QFVJ1HJ-474Z	CAPACITOR	.47MF 5% 50V	U
	C1044	QDYB1CM-103Y	C CAPACITOR		U
	C1045	QETN1HM-225Z	E CAPACITOR	2.2MF 20% 50V	U
	C1061	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C1062	EETC1AM-107ZJC	E CAPACITOR		
	C1063	EETC1AM-475ZJC	E CAPACITOR		
	C1064	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C1065	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C1066	QCBB1HK-331Y	C CAPACITOR	330PF 10% 50V	
	C1067	QETN1HM-225Z	AL E.CAPACITOR	2.2MF 20% 50V	
	C1068	QETN1HM-224Z	AL E.CAPACITOR	.22MF 20% 50V	
	C1069	QETN1HM-475Z	AL E.CAPACITOR	4.7MF 20% 50V	
⚠	D 201	1N5402M-20	DIODE		
⚠	D 202	1N5402M-20	DIODE		
⚠	D 203	1N5402M-20	DIODE		
⚠	D 204	1N5402M-20	DIODE		
⚠	D 211	30DF2-FC	DIODE		
⚠	D 212	30DF2-FC	DIODE		
⚠	D 213	30DF2-FC	DIODE		
⚠	D 214	30DF2-FC	DIODE		
⚠	D 217	1N4003S-T5	SI DIODE		
⚠	D 218	1N4003S-T5	SI DIODE		
	D 219	MTZJ33C-T2	Z DIODE		
	D 220	MTZJ9.1B-T2	ZENER DIODE		
	D 221	MTZJ5.1B-T2	ZENER DIODE		
	D 223	1SS133-T2	SI DIODE		
⚠	D 227	1N4003S-T5	SI DIODE		
⚠	D 233	2A02-M	DIODE		
⚠	D 234	2A02-M	DIODE		
	D 411	1SS133-T2	SI DIODE		
	D 412	1SS133-T2	SI DIODE		
	D 413	1SS133-T2	SI DIODE		
	D 414	1SS133-T2	SI DIODE		
	D 426	MTZJ5.1B-T2	ZENER DIODE		
	D 431	MTZJ2.4B-T2	ZENER DIODE		
	D 432	MTZJ2.4B-T2	ZENER DIODE		
	D 433	MTZJ2.4B-T2	ZENER DIODE		
	D 434	MTZJ5.1B-T2	ZENER DIODE		
	D 501	1SS133-T2	SI DIODE		
	D 502	1SS133-T2	SI DIODE		
	D 571	1SS133-T2	SI DIODE		
	D 572	1SS133-T2	SI DIODE		
	D 703	MTZJ15C-T2	Z DIODE		
	D 704	MTZJ15C-T2	Z DIODE		
	D 719	1SS133-T2	SI DIODE		
	D 720	1SS133-T2	SI DIODE		
	D 723	MTZJ33C-T2	Z DIODE		
	D 724	MTZJ33C-T2	Z DIODE		
	D 725	1SS133-T2	SI DIODE		
	D 726	1SS133-T2	SI.DIODE		
	D 728	1SS133-T2	SI DIODE		
	D 737	1SS133-T2	SI.DIODE		
	D 790	1SS133-T2	SI DIODE		
	D 791	1SS133-T2	SI DIODE		
	D1021	MTZJ6.2C-T2	Z DIODE		U
	D1061	1SS133-T2	SI.DIODE		
	FT111	QNG0020-001Z	FUSE CLIP		
	FT112	QNG0020-001Z	FUSE CLIP		
	FT131	QNG0020-001Z	FUSE CLIP		U
	FT132	QNG0020-001Z	FUSE CLIP		U
	FT511	QNG0020-001Z	FUSE CLIP		
	FT512	QNG0020-001Z	FUSE CLIP		
	FT521	QNG0020-001Z	FUSE CLIP		
	FT522	QNG0020-001Z	FUSE CLIP		
	FW431	QUM156-14Z4Z4	FLAT WIRE		
	FW703	QUM15A-14BFZ4	FLAT WIRE		
	FW704	QUM154-15BFZ4	FLAT WIRE		
	FW705	QUM156-11Z4Z4	FLAT WIRE		
	FW902	QUM155-32BFZ4	FLAT WIRE		U
	IC436	TDA7439	IC		
	IC466	BA3837	IC(VOCALFADER)		U
	IC481	BA15218	IC		
	IC501	BA15218	IC		
	IC502	BA15218	IC		
	IC526	BA15218	IC		
	IC546	BA15218	IC		
	IC571	BA15218	IC		
⚠	IC701	STK412-020	IC(HYBRID)		C,J
⚠	IC701	STK412-010	IC(HYBRID)		U,B,E,EN
	IC901	NJM4580L	IC		U
	IC902	BU9253AS	IC		U
	J 81	QNB0098-001	SPK TERMINAL		
	J 411	QNN0132-001	PIN JACK		
	J 426	GP1FA550TZ	OPT TRANSMITTER		
	J1021	QNS0080-001	6.3 JACK		U
	J1022	QNS0080-001	6.3 JACK		U
	L 401	QQR0779-001Z	INDUCTOR		B,E,EN
	L 701	QQLZ005-R45	INDUCTOR		
	L 702	QQLZ005-R45	INDUCTOR		
	Q 201	KTA1023/OY/-T	TRANSISTOR		
	Q 203	KRC107M-T	TRANSISTOR		
	Q 204	KTC3199/GL/-T	SI.TRANSISTOR		
	Q 240	KTC3199/GL/-T	TRANSISTOR		
	Q 401	2SC3576-JVC-T	TRANSISTOR		
	Q 402	2SC3576-JVC-T	TRANSISTOR		
	Q 411	2SC3576-JVC-T	TRANSISTOR		
	Q 412	2SC3576-JVC-T	TRANSISTOR		
	Q 413	KRA102M-T	D.TRANSISTOR		
	Q 481	2SC3576-JVC-T	TRANSISTOR		
	Q 482	2SC3576-JVC-T	TRANSISTOR		
	Q 483	KRA102M-T	D.TRANSISTOR		
	Q 556	2SC3576-JVC-T	D.TRANSISTOR		
	Q 557	2SC3576-JVC-T	TRANSISTOR		
	Q 558	2SC3576-JVC-T	D.TRANSISTOR		
	Q 559	2SC3576-JVC-T	TRANSISTOR		
	Q 562	2SC3576-JVC-T	SI.TRANSISTOR		
	Q 571	2SC2785/FE/-T	TRANSISTOR		
	Q 572	2SC2785/FE/-T	TRANSISTOR		
	Q 573	2SC2785/FE/-T	TRANSISTOR		
	Q 701	KTA1268/GL/-T	TRANSISTOR		
	Q 702	KTA1268/GL/-T	TRANSISTOR		
	Q 710	2SA965/OY/-T	SI.TRANSISTOR		
	Q 711	KTC3200/GL/-T	TRANSISTOR		
	Q 712	KTA1268/GL/-T	TRANSISTOR		
	Q 713	2SC2235/OY/-T	D.TRANSISTOR		
	Q 726	2SC2389S/SE/-T	SI.TRANSISTOR		
	Q 727	KTA1268/GL/-T	TRANSISTOR		
	Q 728	KTC3199/GL/-T	TRANSISTOR		

■Electrical parts list (Power AMP. & Source select board) Block No. 01

⚠	Item	Parts number	Parts name	Remarks	Area
	Q 733	2SC3576-JVC-T	TRANSISTOR		
	Q 734	2SC3576-JVC-T	TRANSISTOR		
	Q 735	2SC3576-JVC-T	TRANSISTOR		
	Q 736	2SC3576-JVC-T	TRANSISTOR		
	Q 737	2SA1038S/SE/-T	SI.TRANSISTOR		
	Q 790	KTC3199/GL/-T	TRANSISTOR		
	Q 791	KTC3199/GL/-T	TRANSISTOR		
	Q 792	KTC3203/OY/-T	TRANSISTOR		
	Q1021	KRA111M-T	D.TRANSISTOR		U
	Q1022	KRA111M-T	D.TRANSISTOR		U
	Q1023	KRA111M-T	D.TRANSISTOR		U
	Q1061	2SD2144S/VW/-T	SI.TRANSISTOR		
⚠	R 202	QRZ9042-2R2X	UNF C.RES I/M	2.2 1/0W	J
	R 203	QRE141J-302Y	C RESISTOR	3.0K 5% 1/4W	
	R 204	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 205	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 206	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 207	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 209	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 215	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 216	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 217	QRE141J-275Y	C RESISTOR	2.7M 5% 1/4W	
	R 218	QRE141J-273Y	C RESISTOR	27K 5% 1/4W	
⚠	R 233	QRK126J-470X	C RESISTOR	47 5% 1/2W	
⚠	R 234	QRK126J-470X	C RESISTOR	47 5% 1/2W	
	R 242	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
⚠	R 246	QRK126J-1R0X	UNF.MF.RESISTOR	1.0 5% 1/2W	
⚠	R 247	QRK126J-1R0X	UNF.MF.RESISTOR	1.0 5% 1/2W	
	R 401	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 402	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 403	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 404	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 405	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 406	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 407	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 411	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	
	R 412	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	
	R 413	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R 414	QRE141J-683Y	C RESISTOR	68K 5% 1/4W	
	R 415	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R 416	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R 417	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 418	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 419	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 420	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 421	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 426	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R 431	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R 432	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R 434	QRJ146J-4R7X	UNF.C.RESISTOR	4.7 5% 1/4W	
	R 435	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 436	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 437	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 438	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 439	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 440	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 441	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 442	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 443	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	C,J
	R 443	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	B,E,EN
	R 444	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	B,E,EN
	R 444	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	C,J
	R 466	QRE141J-201Y	C RESISTOR	200 5% 1/4W	U
	R 467	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	U
	R 468	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	U
	R 469	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	U
	R 470	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	U
	R 471	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	U
	R 472	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	U
	R 473	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R 474	QRE141J-513Y	C RESISTOR	51K 5% 1/4W	
	R 475	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 485	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 486	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 487	QRE141J-823	C RESISTOR	82K 5% 1/4W	
	R 488	QRE141J-823	C RESISTOR	82K 5% 1/4W	
	R 489	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 490	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 491	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 492	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 493	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 494	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 495	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 496	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 498	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 501	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 502	QRE141J-332Y	C RESISTOR	3.3K 5% 1/4W	
	R 503	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R 504	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 505	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 506	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 507	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R 508	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R 509	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 510	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 511	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 512	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R 513	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R 516	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 517	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 518	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 519	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 520	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 521	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 522	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 523	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R 524	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R 526	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 528	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R 529	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 530	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 532	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 534	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R 536	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	
	R 537	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 541	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 552	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R 556	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R 557	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 558	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 559	QRE141J-133Y	C RESISTOR	13K 5% 1/4W	
	R 560	QRE141J-303Y	C RESISTOR	30K 5% 1/4W	
	R 562	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 563	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 564	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 565	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 571	QRE141J-271Y	C RESISTOR	270 5% 1/4W	
	R 572	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 573	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 575	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 576	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 577	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 579	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R 580	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 581	QRE141J-224Y	C RESISTOR	220K 5% 1/4W	
	R 582	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 583	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 591	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R 701	QRJ146J-470X	C RESISTOR	47 5% 1/4W	
	R 702	QRJ146J-470X	C RESISTOR	47 5% 1/4W	
	R 703	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 704	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 705	QRJ146J-821X	UNF C.RESISTOR	820 5% 1/4W	
	R 706	QRJ146J-821X	UNF C.RESISTOR	820 5% 1/4W	
	R 707	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 708	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	

■Electrical parts list (Power AMP. & Source select board) **Block No. 01**

⚠	Item	Parts number	Parts name	Remarks	Area
	R 713	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 714	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 715	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 716	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 717	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 718	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 719	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 720	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 721	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 722	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 723	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 724	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 725	QRE141J-823Y	C RESISTOR	82K 5% 1/4W	
	R 726	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 727	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 728	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 729	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 730	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
⚠	R 731	QRJ146J-4R7X	UNF C.RESISTOR	4.7 5% 1/4W	
⚠	R 732	QRJ146J-4R7X	UNF C.RESISTOR	4.7 5% 1/4W	
	R 733	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 734	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 735	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 736	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 738	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 739	QRL01DJ-821X	OMF RESISTOR	820 5% 1/1W	
	R 740	QRL01DJ-821X	OMF RESISTOR	820 5% 1/1W	
	R 750	QRJ146J-151X	CARBON RESISTOR	150 5% 1/4W	
	R 753	QRZ0196-R22	EMIT.RESISTOR	1/1W	
	R 754	QRZ0196-R22	EMIT.RESISTOR	1/1W	
	R 761	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 762	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 766	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R 768	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 769	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
⚠	R 774	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 775	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 776	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 777	QRE141J-103Y	CARBON RESISTOR	10K 5% 1/4W	
	R 778	QRE141J-103Y	CARBON RESISTOR	10K 5% 1/4W	
	R 781	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 786	QRE141J-103Y	CARBON RESISTOR	10K 5% 1/4W	
	R 787	QRE141J-103Y	CARBON RESISTOR	10K 5% 1/4W	
	R 790	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 791	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 792	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 793	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 794	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 795	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 796	QRE141J-682Y	C RESISTOR	6.8K 5% 1/4W	
	R 797	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	
	R 798	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	RY 1	QSK0057-001	RELAY		
	R1001	QRZ9044-335	COMP.RESISTOR	3.3M 1/0W	C,J
	R1021	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	U
	R1022	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	U
	R1031	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	U
	R1032	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	U
	R1033	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	U
	R1034	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	U
	R1035	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	U
	R1036	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	U
	R1037	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	U
	R1038	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	U
	R1039	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	U
	R1040	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	U
	R1041	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	U
	R1042	QRE141J-221Y	C RESISTOR	220 5% 1/4W	U
	R1043	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	U
	R1044	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	U
	R1045	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	U
	R1061	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1062	QRE141J-123Y	C RESISTOR	12K 5% 1/4W	

⚠	Item	Parts number	Parts name	Remarks	Area
	R1063	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R1064	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R1065	QRE141J-101Y	C RESISTOR	100 5% 1/4W	
	R1066	QRE141J-475Y	C RESISTOR	4.7M 5% 1/4W	
	R1067	QRE141J-560Y	C RESISTOR	56 5% 1/4W	
	R1068	QRE141J-203Y	C RESISTOR	20K 5% 1/4W	
	R1069	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R1070	QRE141J-561Y	C RESISTOR	560 5% 1/4W	
	R1071	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1072	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R1073	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R1074	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	S 500	QSW0812-001	VOLTAGE SWITCH		U
	SP434	E3400-431	FELT SPACER		
	SP556	E3400-431	FELT SPACER		
	SP738	E3400-431	FELT SPACER		
	TB101	QNZ0079-001Z	TAB		
	TB102	QNZ0079-001Z	TAB		
	VR901	QVQ0045-B54	V RESISTOR		U

■ Electrical parts list (System control board)

Block No. 02

⚠	Item	Parts number	Parts name	Remarks	Area
	C 360	QTE1C06-476Z	E CAPACITOR		
	C 361	QDYB1CM-103Y	C CAPACITOR		
	C 362	EETC1HM-226ZJC	E CAPACITOR		
	C 366	EETC1HM-226ZJC	E CAPACITOR		
	C 367	QDYB1CM-103Y	C CAPACITOR		
	C 370	QDYB1CM-103Y	C CAPACITOR		
	C 371	EETC1HM-226ZJC	E CAPACITOR		
	C 372	EETC1HM-226ZJC	E CAPACITOR		
	C 373	QDYB1CM-103Y	C CAPACITOR		
	C 374	EETC1HM-226ZJC	E CAPACITOR		
	C 601	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 602	QCF31HZ-223Z	C CAPACITOR	.022MF +80:-20%	
	C 603	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 604	QCBB1HK-151Y	C CAPACITOR	150PF 10% 50V	
	C 605	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 606	QCBB1HK-221Y	C CAPACITOR	220PF 10% 50V	
	C 607	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 608	QETN1JM-476Z	E CAPACITOR	47MF 20% 63V	
	C 609	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V	
	C 610	QCSB1HJ-100Y	C CAPACITOR	10PF 5% 50V	
	C 611	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 612	QETN1HM-476Z	E CAPACITOR	47MF 20% 50V	
	C 613	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 613	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	B,E,EN
	C 614	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	B,E,EN
	C 614	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 615	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 615	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	B,E,EN
	C 616	QFLM1HJ-473Z	TF CAPACITOR	.047MF 5% 50V	B,E,EN
	C 616	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	C,U
	C 617	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	J
	C 618	QFLM1HJ-473Z	M CAPACITOR	.047MF 5% 50V	J
	C 621	QTE1V06-106Z	E CAPACITOR		
	C 622	QTE1V06-106Z	E CAPACITOR		
	C 623	QTE1V06-106Z	E CAPACITOR		
	C 624	QTE1V06-106Z	E CAPACITOR		
	C 639	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 651	QDXB1CM-222Y	C CAPACITOR		
	C 652	QDXB1CM-222Y	C CAPACITOR		
	C 653	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 654	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 655	QFLM1HJ-393Z	M CAPACITOR	.039MF 5% 50V	
	C 656	QFLM1HJ-393Z	M CAPACITOR	.039MF 5% 50V	
	C 680	EETC1HM-224ZJC	E CAPACITOR		
	C 683	QFLM1HJ-823Z	M CAPACITOR	.082MF 5% 50V	
	C 801	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 803	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 804	QETN0JM-477Z	E CAPACITOR	470MF 20% 6.3V	
	C 805	QDGB1HK-102Y	C CAPACITOR		
	C 806	QDGB1HK-102Y	C CAPACITOR		
	C 807	QCSB1HJ-390Y	C CAPACITOR	39PF 5% 50V	
	C 808	QCSB1HJ-330Y	C CAPACITOR	33PF 5% 50V	
	C 809	QCSB1HJ-330Y	C CAPACITOR	33PF 5% 50V	
	C 810	QCSB1HJ-390Y	C CAPACITOR	39PF 5% 50V	
	C 811	QDGB1HK-102Y	C CAPACITOR		
	C 812	QCSB1HJ-220Y	C CAPACITOR	22PF 5% 50V	
	C 813	QCSB1HJ-270Y	C CAPACITOR	27PF 5% 50V	
	C 814	QETN0JM-108Z	AL E.CAPACITOR	1000MF 20% 6.3V	
	C 815	EETC1HM-226ZJC	E CAPACITOR		
	C 816	EETC1CM-476ZJC	E CAPACITOR		
	C 817	EETC1HM-226ZJC	E CAPACITOR		
	C 820	QCZ0205-155Z	ML C CAPACITOR	1.5MF	
	C 821	QDYB1CM-103Y	C CAPACITOR		
	C 823	QFVJ1HJ-334Z	TF CAPACITOR	.33MF 5% 50V	
	C 831	QDYB1CM-103Y	C CAPACITOR		
	C 832	QDYB1CM-103Y	C CAPACITOR		
	C 834	EETC1HM-226ZJC	E.CAPACITOR		
	C 835	QDGB1HK-102Y	C CAPACITOR		
	C 855	QETN0JM-227Z	E CAPACITOR	220MF 20% 6.3V	
	C 856	EETC1AM-107ZJC	E CAPACITOR		
	C 857	EETC1CM-476ZJC	E CAPACITOR		
	C 870	QDGB1HK-103Y	C CAPACITOR		
	C 871	EETC1HM-475ZJC	E CAPACITOR		
	C 872	EETC1HM-224ZJC	E CAPACITOR		
	C 873	EETC1HM-224ZJC	E CAPACITOR		
	C 874	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 875	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 876	EETC1HM-105ZJC	E CAPACITOR		
	C 877	QDGB1HK-681Y	C CAPACITOR		
	C 878	QDXB1CM-182Y	C CAPACITOR		
	C 879	QCSB1HJ-330Y	C CAPACITOR	33PF 5% 50V	
	C 880	QFLM1HJ-153Z	M CAPACITOR	.015MF 5% 50V	
	C 881	QETN1EM-106Z	E.CAPACITOR	10MF 20% 25V	
	C 882	QETN1EM-106Z	E.CAPACITOR	10MF 20% 25V	
	C 883	QFVJ1HJ-104Z	TF CAPACITOR	.10MF 5% 50V	
	C 884	QETN1AM-227Z	E CAPACITOR	220MF 20% 10V	
	C 885	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 886	QFLM1HJ-103Z	M CAPACITOR	.010MF 5% 50V	
	C 887	QFVJ1HJ-104Z		.10MF 5% 50V	
	C 889	EETC1HM-105ZJC	E CAPACITOR		
	C 890	QDGB1HK-102Y	C CAPACITOR		
	C 950	QDYB1CM-103Y	C.CAPACITOR		
	C 951	QDYB1CM-103Y	C.CAPACITOR		
	C 991	QDYB1CM-103Y	C CAPACITOR		
	C 992	QDYB1CM-103Y	C CAPACITOR		
	CN602	QGB2510K2-11	CONNECTOR		
	CN713	VMC0107-R10	CONN.TERMINAL		
	CN815	QGD2504C1-03Z	WIRE TRAP CONNE		
	CN850	QGD2504C1-03Z	WIRE TRAP CONNE		
	CN851	QGD2504C1-04Z	WIRE TRAP CONNE		
	CN860	QGB1214K1-20S	CONNECTOR		
	CN861	QGB1214K1-20S	CONNECTOR		
	CN862	QGD2504C1-03Z	WIRE TRAP CONNE		
	CN863	QGD2504C1-03Z	WIRE TRAP CONNE		
	CN865	QGF1205C1-09	CONNECTOR		C,J,U
	CN865	QGF1205C1-13	CONNECTOR		B,E,EN
	CN867	QGA2501C1-02	2P CONNECTOR		
	CN868	QGF1016C1-19	CONNECTOR		
	CN869	QGF1205C1-11	CONNECTOR		
	CN879	QGF1031C1-09S	FFC/FPC CONNE		
	CN880	QGF1205C1-11	CONNECTOR		
	CN883	QGD2504C1-03Z	WIRE TRAP CONNE		
	CN884	QGD2504C1-03Z	WIRE TRAP CONNE		
	CN900	QGD2504C1-04Z	WIRE TRAP CONNE		
	CN901	QGD2504C1-04Z	WIRE TRAP CONNE		
	CN905	QGF1205C1-11	CONN.TERMINAL		
	CN906	QGF1205C1-11	CONN.TERMINAL		
	CN979	QGF1016F1-09	CONNECTOR		
	CN990	QGF1205F1-11	CONNECTOR		
	C1001	QDXB1CM-392Y	C CAPACITOR		B,E,EN
	C1002	QDXB1CM-392Y	C CAPACITOR		B,E,EN
	C1003	QDGB1HK-102Y	C CAPACITOR		
	C1004	QDGB1HK-102Y	C CAPACITOR		
	C1005	QDGB1HK-102Y	C CAPACITOR		
	C1006	QDGB1HK-102Y	C CAPACITOR		
	D 360	MTZJ5.1B-T2	ZENER DIODE		
	D 361	MTZJ11C-T2	Z DIODE		
	D 362	MTZJ6.8C-T2	Z DIODE		
	D 365	MTZJ9.1B-T2	ZENER DIODE		
	D 366	MTZJ11C-T2	Z.DIODE		
	D 367	MTZJ10C-T2	Z.DIODE		
	D 368	MTZJ11C-T2	Z.DIODE		
	D 369	MTZJ10C-T2	Z.DIODE		
	D 370	MTZJ11C-T2	Z.DIODE		
	D 619	1SS133-T2	SI DIODE		
	D 620	1SS133-T2	SI DIODE		
	D 622	MTZJ9.1B-T2	ZENER DIODE		
	D 650	1SS133-T2	SI DIODE		
	D 680	MTZJ2.4B-T2	Z.DIODE		
	D 801	1N4003S-T5	SI DIODE		
	D 803	1SS119-02-T2	SI DIODE		
	D 804	1SS133-T2	SI DIODE		
	D 805	1SS133-T2	SI DIODE		
	D 831	MTZJ5.1B-T2	ZENER DIODE		
	D 832	MTZJ5.1B-T2	ZENER DIODE		
	D 853	MTZJ8.2C-T2	ZENER DIODE		

■ Electrical parts list (System control board)

Block No. 02

⚠	Item	Parts number	Parts name	Remarks	Area
	D 871	1SS133-T2	SI DIODE		
	D 872	1SS133-T2	SI DIODE		
	D 873	1SS133-T2	SI DIODE		
	D 950	SLA-570JT3F	LED		
	D 951	SLA-570JT3F	LED		
	D 952	SLA-570JT3F	LED		
	D 953	SLA-570JT3F	LED		
	D 955	SLR-342MC-T	LED		
	D 956	SLR-342MC-T	LED		
	D 957	SLR-342MC-T	LED		
	D 958	SLR-342MC-T	LED		
	D 961	1SS133-T2	SI DIODE		
	D 962	SLA-370LT3F	LED	POWER LED	
	D 981	SLR-342MC-T	LED		
	D 982	SLR-342MC-T	LED		
	D 983	SLR-342MC-T	LED		
	D 984	SLR-342MC-T	LED		
	D 991	SLA-570JT3F	LED		
	D 992	SLA-570JT3F	LED		
	D 993	SLA-570JT3F	LED		
	D 994	SLA-570JT3F	LED		
	EP201	E409182-001SM	GRAND TERMINAL		
	FL801	QLF0074-001	FL TUBE		
	FW850	QUM153-06Z4Z4	FLAT WIRE		
	FW862	QUM026-26DGZ4	PARA RIBON WIRE		
	FW883	QUM026-26DGZ3	PARA RIBON WIRE		
	FW915	QUM153-12BFZ4	FLAT WIRE		
	FW950	QUM157-11BFZ4	FLAT WIRE		
	FW951	QUM154-06Z4Z4	FLAT WIRE		
	FW952	QUM024-16DGZ4	WIRE		
⚠	IC602	STK402-050	IC(HYBRID)		C,J
⚠	IC602	STK402-040	IC(HYBRID)		U,B,E,EN
	IC810	MN101C35DEA	IC(MCU)		
	IC811	BU4094BC	IC		
	IC812	BA3835S	IC		
	IC853	LB1641	IC		
	IC915	GP1U281X	IC		
	J 82	QNB0097-001	SPK.TERMINAL		C,J,U
	J 82	QNB0097-002	SPK TERMINAL		B,E,EN
	JS950	QSW0857-001	ROTARY ENCODER		
	JS992	QSW0857-001	ROTARY ENCODER		
	J1001	QNS0159-001	3.5 JACK		
	L 601	QQLZ005-R45	INDUCTOR		
	L 602	QQLZ005-R45	INDUCTOR		
	L 801	QQL29BJ-100Z	INDUCTOR		
	L 802	QQL231K-220Y	INDUCTOR		
	L 803	QQL29BJ-100Z	INDUCTOR		
	L 805	QQL29BJ-100Z	INDUCTOR		
	L 806	QQL29BJ-100Z	INDUCTOR		
	L 807	QQR0779-001Z	INDUCTOR		
	L 851	QQL29BJ-100Z	INDUCTOR		
	L 870	QQR0779-001Z	INDUCTOR		
	L1001	QQL231K-470Y	INDUCTOR		B,E,EN
	L1002	QQL231K-470Y	INDUCTOR		B,E,EN
	L1003	QQL231K-2R2Y	INDUCTOR		
	Q 360	2SD2395/EF/	TRANSISTOR		
	Q 361	KTC3199/GL/-T	TRANSISTOR		
	Q 362	KTC3199/GL/-T	TRANSISTOR		
	Q 366	2SD2395/EF/	TRANSISTOR		
	Q 367	KTA1267/YG/-T	TRANSISTOR		
	Q 368	KTC3199/GL/-T	TRANSISTOR		
	Q 369	2SD2395/EF/	TRANSISTOR		
	Q 370	KTC3199/GL/-T	TRANSISTOR		
	Q 371	2SB1274/RS/	TRANSISTOR		C,J
	Q 372	KTA1023/OY/-T	SI.TRANSISTOR		U
	Q 372	KTA1023/OY/-T	SI.TRANSISTOR		B,E,EN
	Q 373	KRA104M-T	D.TRANSISTOR		
	Q 374	KRC104M-T	D.TRANSISTOR		
	Q 375	KTA1267/YG/-T	TRANSISTOR		
	Q 601	KTA1268/GL/-T	TRANSISTOR		
	Q 602	KTA1268/GL/-T	TRANSISTOR		
	Q 612	KTA1267/YG/-T	TRANSISTOR		
	Q 613	KRC102M-T	D.TRANSISTOR		
	Q 680	2SK301/PQ/-T	TRANSISTOR(FET)		
	Q 801	KTC3195/O/-T	TRANSISTOR		
	Q 802	KTC3195/O/-T	TRANSISTOR		
	Q 803	KRC102M-T	D.TRANSISTOR		
	Q 804	KRC102M-T	D.TRANSISTOR		
	Q 805	KRC102M-T	D.TRANSISTOR		
	Q 806	KRC102M-T	D.TRANSISTOR		
	Q 807	KRC102M-T	D.TRANSISTOR		
	Q 808	KRC102M-T	D.TRANSISTOR		
	Q 809	KRC102M-T	D.TRANSISTOR		
	Q 810	KRC102M-T	D.TRANSISTOR		
	Q 811	KRC102M-T	D.TRANSISTOR		
	Q 830	KTC3199/GL/-T	TRANSISTOR		
	Q 851	KTC3199/GL/-T	TRANSISTOR		
	Q 870	2SA1175/HFE/-T	TRANSISTOR		
	Q 871	KTC3199/GL/-T	TRANSISTOR		
	Q 872	KRC107M-T	D.TRANSITOR		
	Q 873	KTC3199/GL/-T	TRANSISTOR		
	Q 874	KTC3199/GL/-T	TRANSISTOR		
	Q 875	KRC102M-T	D.TRANSISTOR		
	Q 877	KRC114M-T	TRANSISTOR		
	Q 878	KRA102M-T	D.TRANSISTOR		
	Q 879	KRA102M-T	DIGI.TRANSISTOR		
	Q 880	KRA102M-T	DIGI.TRANSISTOR		
	Q 905	KRA107M-T	DIGI.TRANSISTOR		
	Q 906	KRA107M-T	DIGI.TRANSISTOR		
	Q 950	KRC102M-T	D.TRANSISTOR		
	Q 961	KRA102M-T	D.TRANSISTOR		
	Q 991	KRC102M-T	D.TRANSISTOR		
⚠	R 360	QRZ9042-2R2X	FUSI.RESISTOR	2.2 1/0W	B,E,EN
⚠	R 360	QRJ146J-150X	CARBON RESISTOR	15 5% 1/4W	J
⚠	R 360	QRZ9042-2R2X	F RESISTOR	2.2 1/0W	C,U
⚠	R 361	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	C,U
⚠	R 361	QRJ146J-150X	CARBON RESISTOR	15 5% 1/4W	J
⚠	R 361	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	B,E,EN
	R 362	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 363	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 364	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R 365	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R 366	QRE141J-201Y	CARBON RESISTOR	200 5% 1/4W	
	R 367	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R 368	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 372	QRE141J-4R7Y	C RESISTOR	4.7 5% 1/4W	
⚠	R 373	QRZ9021-220	FUSI.RESISTOR	22 1/0W	J
⚠	R 374	QRZ9021-220	FUSI.RESISTOR	22 1/0W	J
	R 376	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
	R 377	QRE141J-561Y	C RESISTOR	560 5% 1/4W	
	R 378	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 381	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R 382	QRE141J-221Y	C RESISTOR	220 5% 1/4W	
⚠	R 383	QRZ9005-100X	F RESISTOR	10 1/0W	J
	R 384	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 385	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 388	QRE141J-681Y	C RESISTOR	680 5% 1/4W	
	R 389	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
⚠	R 392	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	J
⚠	R 393	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	J
⚠	R 394	QRZ9006-4R7X	F RESISTOR	4.7 1/0W	J
⚠	R 395	QRZ9042-2R2X	F.RESISTOR	2.2 1/0W	C,U
⚠	R 395	QRZ9042-2R2X	FUSI.RESISTOR	2.2 1/0W	B,E,EN
⚠	R 395	QRJ146J-4R7X	UNF.C.RESISTOR	4.7 5% 1/4W	J
⚠	R 396	QRZ9042-2R2X	F.RESISTOR	2.2 1/0W	
	R 601	QRJ146J-101X	C RESISTOR	100 5% 1/4W	
	R 602	QRJ146J-101X	C RESISTOR	100 5% 1/4W	
	R 603	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 604	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 605	QRJ146J-122X	UNF C.RESISTOR	1.2K 5% 1/4W	
	R 606	QRJ146J-122X	UNF C.RESISTOR	1.2K 5% 1/4W	
	R 607	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 608	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 613	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 614	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 615	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	

■ Electrical parts list (System control board) Block No. 02

⚠	Item	Parts number	Parts name	Remarks	Area
	R 616	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 617	QRE141J-221Y	C RESISTOR	1.2K 5% 1/4W	
	R 618	QRE141J-221Y	C RESISTOR	1.2K 5% 1/4W	
	R 619	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 620	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 621	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 622	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 639	QRL01DJ-821X	OMF RESISTOR	820 5% 1/1W	
	R 640	QRL01DJ-821X	OMF RESISTOR	820 5% 1/1W	
	R 641	QRJ146J-471X	UNF.C.RESISTOR	470 5% 1/4W	C,J
	R 641	QRJ146J-151X	CARBON RESISTOR	150 5% 1/4W	U
	R 641	QRJ146J-151X	CARBON RESISTOR	150 5% 1/4W	B,E,EN
⚠	R 650	QRJ146J-4R7X	UNF C.RESISTOR	4.7 5% 1/4W	
⚠	R 651	QRJ146J-4R7X	UNF C.RESISTOR	4.7 5% 1/4W	
	R 652	QRT01DJ-R22X	UNF.MF.RESISTOR	5% 1/1W	
	R 653	QRT01DJ-R22X	UNF.MF.RESISTOR	5% 1/1W	
	R 654	QRT01DJ-R22X	UNF.MF.RESISTOR	5% 1/1W	
	R 655	QRT01DJ-R22X	UNF.MF.RESISTOR	5% 1/1W	
	R 666	QRE141J-333Y	C RESISTOR	33K 5% 1/4W	
	R 667	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 668	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 674	QRJ146J-100X	UNF.C RESISTOR	10 5% 1/4W	
	R 675	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 676	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 680	QRE141J-105Y	C RESISTOR	1.0M 5% 1/4W	
	R 681	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R 682	QRE141J-475Y	C RESISTOR	4.7M 5% 1/4W	
	R 683	QRE141J-153Y	C RESISTOR	15K 5% 1/4W	
	R 684	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 801	QRE141J-331Y	C RESISTOR	330 5% 1/4W	
	R 802	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 803	QRE141J-223Y	C RESISTOR	22K 5% 1/4W	
	R 804	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R 805	QRE141J-822Y	C RESISTOR	8.2K 5% 1/4W	
	R 806	QRE141J-124Y	C RESISTOR	120K 5% 1/4W	
	R 807	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 808	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 809	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 810	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 811	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 812	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 813	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 814	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 815	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 816	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 817	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 818	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 819	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 820	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 821	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 822	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 823	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 824	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 825	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 826	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 827	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 830	QRE141J-151Y	C RESISTOR	150 5% 1/4W	
	R 831	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 832	QRE141J-103Y	CARBON RESISTOR	10K 5% 1/4W	
	R 834	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 835	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 836	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 837	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 838	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 839	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 840	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 841	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 842	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 843	QRE141J-221Y	C RESISTOR	220 5% 1/4W	B,E,EN
	R 844	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 845	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 846	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 847	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	

⚠	Item	Parts number	Parts name	Remarks	Area
	R 848	QRE141J-331Y	C RESISTOR	1.0K 5% 1/4W	
	R 849	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 850	QRE141J-681Y	CARBON RESISTOR	680 5% 1/4W	
	R 851	QRE141J-391Y	C RESISTOR	390 5% 1/4W	
	R 852	QRE141J-4R7Y	C RESISTOR	4.7 5% 1/4W	
	R 853	QRZ9042-2R2X	F RESISTOR	2.2 1/0W	
	R 855	QRE141J-243Y	C RESISTOR	24K 5% 1/4W	
	R 856	QRE141J-100Y	C RESISTOR	10 5% 1/4W	
	R 857	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 858	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 870	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 871	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 872	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 873	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 874	QRE141J-182Y	C RESISTOR	1.8K 5% 1/4W	
	R 875	QRE141J-472Y	C RESISTOR	4.7K 5% 1/4W	
	R 876	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 877	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 878	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 879	QRE141J-473Y	C RESISTOR	47K 5% 1/4W	
	R 880	QRE141J-225Y	C RESISTOR	2.2M 5% 1/4W	
	R 881	QRE141J-103Y	CARBON RESISTOR	10K 5% 1/4W	
	R 882	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 883	QRE141J-220Y	C RESISTOR	22 5% 1/4W	
	R 885	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 886	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 887	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 888	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 889	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 891	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 892	QRE141J-104Y	C RESISTOR	100K 5% 1/4W	
	R 893	QRE141J-753Y	C RESISTOR	75K 5% 1/4W	
	R 894	QRE141J-753Y	C RESISTOR	75K 5% 1/4W	J,C
	R 894	QRE141J-334Y	C RESISTOR	330K 5% 1/4W	B,E,EN
	R 894	QRE141J-334Y	C RESISTOR	330K 5% 1/4W	U
	R 895	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 896	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 897	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 898	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 899	QRE141J-4R3Y	C RESISTOR	4.3 5% 1/4W	
	R 905	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 906	QRE141J-563Y	C RESISTOR	56K 5% 1/4W	
	R 921	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 922	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 923	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R 924	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 925	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 926	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 927	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R 928	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 931	QRE141J-202Y	C RESISTOR	2.0K 5% 1/4W	
	R 932	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R 933	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 934	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 935	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 936	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R 937	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 938	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 939	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 941	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 942	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 943	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R 944	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 945	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 946	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 950	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	R 951	QRE141J-753Y	C RESISTOR	75K 5% 1/4W	C,J,U
	R 951	QRE141J-334Y	C RESISTOR	330K 5% 1/4W	B,E,EN
	R 952	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R 953	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 954	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 955	QRE141J-680Y	C RESISTOR	68 5% 1/4W	
	R 956	QRE141J-680Y	C RESISTOR	68 5% 1/4W	

■ Electrical parts list (System control board)

Block No. 02

⚠	Item	Parts number	Parts name	Remarks	Area
	R 957	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	R 961	QRE141J-201Y	C RESISTOR	200 5% 1/4W	
	R 962	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 963	QRE141J-103Y	C RESISTOR	10K 5% 1/4W	
	R 964	QRE141J-183Y	C RESISTOR	18K 5% 1/4W	
	R 981	QRE141J-680Y	C RESISTOR	68 5% 1/4W	
	R 982	QRE141J-680Y	C RESISTOR	68 5% 1/4W	
	R 985	QRE141J-392Y	C RESISTOR	3.9K 5% 1/4W	
	R 986	QRE141J-562Y	C RESISTOR	5.6K 5% 1/4W	
	R 991	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 992	QRE141J-102Y	C RESISTOR	1.0K 5% 1/4W	
	R 993	QRE141J-122Y	C RESISTOR	1.2K 5% 1/4W	
	R 994	QRE141J-152Y	C RESISTOR	1.5K 5% 1/4W	
	R 995	QRE141J-222Y	C RESISTOR	2.2K 5% 1/4W	
	R 996	QRE141J-272Y	C RESISTOR	2.7K 5% 1/4W	
	R 998	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	R 999	QRE141J-750Y	C RESISTOR	75 5% 1/4W	
	RA801	QRB169J-104	R.NETWORK	100K 5% 1/6W	
	RA802	QRB169J-104	R.NETWORK	100K 5% 1/6W	
	RY 2	QSK0057-001	RELAY		
	S 921	QSW0825-001Z	TACT SWITCH		
	S 922	QSW0825-001Z	TACT SWITCH		
	S 923	QSW0825-001Z	TACT SWITCH		
	S 924	QSW0825-001Z	TACT SWITCH		
	S 925	QSW0825-001Z	TACT SWITCH		
	S 926	QSW0825-001Z	TACT SWITCH		
	S 927	QSW0825-001Z	TACT SWITCH		
	S 928	QSW0825-001Z	TACT SWITCH		
	S 931	QSW0825-001Z	TACT SWITCH		
	S 932	QSW0825-001Z	TACT SWITCH		
	S 933	QSW0825-001Z	TACT SWITCH		
	S 934	QSW0825-001Z	TACT SWITCH		
	S 935	QSW0825-001Z	TACT SWITCH		
	S 936	QSW0825-001Z	TACT SWITCH		
	S 937	QSW0825-001Z	TACT SWITCH		
	S 938	QSW0825-001Z	TACT SWITCH		
	S 939	QSW0825-001Z	TACT SWITCH		
	S 941	QSW0825-001Z	TACT SWITCH	RDS	B,E,EN
	S 942	QSW0825-001Z	TACT SWITCH	RDS	B,E,EN
	S 943	QSW0825-001Z	TACT SWITCH	RDS	B,E,EN
	S 944	QSW0825-001Z	TACT SWITCH	RDS	B,E,EN
	S 945	QSW0825-001Z	TACT SWITCH		
	S 946	QSW0825-001Z	TACT SWITCH		
	S 948	QSW0518-001	PUSH SWITCH	PANEL OP	
	S 949	QSW0122-001	PUSH SWITCH	PANEL CL	
	S 952	QSW0825-001Z	TACT SWITCH		
	S 953	QSW0825-001Z	TACT SWITCH		
	S 963	QSW0825-001Z	TACT SWITCH		
	S 985	QSW0825-001Z	TACT SWITCH		
	S 986	QSW0825-001Z	TACT SWITCH		
	S 991	QSW0825-001Z	TACT SWITCH		
	S 992	QSW0825-001Z	TACT SWITCH		
	S 993	QSW0825-001Z	TACT SWITCH		
	S 994	QSW0825-001Z	TACT SWITCH		
	S 995	QSW0825-001Z	TACT SWITCH		
	S 996	QSW0825-001Z	TACT SWITCH		
	S 997	QSW0825-001Z	TACT SWITCH		
	SP801	VYH7653-001	IC HOLDER		
	SP814	E3400-431	SPACER		
	SP823	E3400-431	SPACER		
	TH830	QAD0012-202	THERMISTOR		
	X 801	QAX0283-001Z	RESONATOR		
	X 802	QAX0401-001	CRYSTAL		

■ Electrical parts list (Tuner board) Ver.J/C

Block No. 03

⚠	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB21HK-223X	C CAPACITOR		
	C 2	NCB21HK-103X	C CAPACITOR		
	C 3	EETC1CM-106ZJC	E CAPACITOR		
	C 4	NCB21HK-103X	C CAPACITOR		
	C 6	NCB21HK-102X	C CAPACITOR		
	C 7	NCB21HK-102X	C CAPACITOR		
	C 8	NCB21HK-102X	C CAPACITOR		
	C 10	NRSA02J-0R0X	MG RESISTOR		
	C 11	NCB21HK-104X	C CAPACITOR		
	C 12	NCB21HK-473X	C CAPACITOR		
	C 13	NDC21HJ-120X	C CAPACITOR		
	C 14	EETC1AM-107ZJC	E CAPACITOR		
	C 15	NDC21HJ-120X	C CAPACITOR		
	C 16	NDC21HJ-120X	C CAPACITOR		
	C 17	NCB21HK-392X	C CAPACITOR		
	C 18	QENC1HM-474Z	NP E.CAPACITOR	.47MF 20% 50V	
	C 19	NCB21HK-473X	C CAPACITOR		
	C 20	NCB21HK-102X	C CAPACITOR		
	C 21	NCB21HK-223X	C CAPACITOR		
	C 22	NCS21HJ-151X	C CAPACITOR		
	C 23	NCS21HJ-151X	C CAPACITOR		
	C 24	NCS21HJ-151X	C CAPACITOR		
	C 25	EETC1AM-107ZJC	E CAPACITOR		
	C 26	NCB21HK-102X	C CAPACITOR		
	C 27	NCB21HK-102X	C CAPACITOR		
	C 30	EETC1CM-107ZJC	E CAPACITOR		
	C 31	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 32	NCB21HK-473X	C CAPACITOR		
	C 33	NCB21HK-473X	C CAPACITOR		
	C 34	NCB21HK-223X	C CAPACITOR		
	C 35	NCB21HK-473X	C CAPACITOR		
	C 36	EETC1HM-105ZJC	E CAPACITOR		
	C 37	EETC1HM-105ZJC	E CAPACITOR		
	C 38	EETC1HM-224ZJC	E CAPACITOR		
	C 39	EETC1HM-105ZJC	E CAPACITOR		
	C 40	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 41	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 42	NCB21HK-222X	C CAPACITOR		
	C 43	NCB21HK-222X	C CAPACITOR		
	C 44	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 45	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 46	NCB21HK-273X	C CAPACITOR		
	C 47	EETC1HM-105ZJC	E CAPACITOR		
	C 48	NCB21HK-222X	C CAPACITOR		
	C 49	NCS21HJ-471X	C CAPACITOR		
	C 50	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 51	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 52	QFVJ1HJ-274Z	CAPACITOR	.27MF 5% 50V	
	C 53	EETC1CM-226ZJC	E CAPACITOR		
	C 54	NCB21HK-473X	C CAPACITOR		
	C 57	NCB21HK-102X	C CAPACITOR		
	C 58	NCB21HK-473X	C CAPACITOR		
	C 59	NCB21HK-102X	C CAPACITOR		
	CF 1	VCF2L3B-105Z	CERAMIC FILTER		
	CF 2	VCF2L3B-105Z	CERAMIC FILTER		
	CF 3	QAX0610-001Z	C DISCRIMINATOR		
	CN 1	QGF1205F1-09	CONNECTOR		
	D 1	1SS133-T2	SI DIODE		
	D 2	1SS133-T2	SI DIODE		
	D 3	1SS133-T2	SI DIODE		
	D 4	1SS133-T2	SI DIODE		
	D 11	1SS133-T2	SI DIODE		
	IC 1	LA1838	IC		
	IC 2	LC72136N	IC		
	J 1	QNB0014-001	ANT TERMINAL		
	L 1	QQR0796-001	COIL BLOCK		
	Q 1	2SC2814/4-5/-X	TRANSISTOR		
	Q 5	DTA114YKA-X	TRANSISTOR		
	R 1	QRE141J-560Y	C RESISTOR	56 5% 1/4W	
	R 2	NRSA02J-331X	MG RESISTOR		
	R 3	NRSA02J-224X	MG RESISTOR		
	R 4	NRSA02J-331X	MG RESISTOR		
	R 5	NRSA02J-560X	MG RESISTOR		
	R 6	NRSA02J-240X	MG RESISTOR		
	R 10	NRSA02J-222X	MG RESISTOR		
	R 13	NRSA02J-103X	MG RESISTOR		
	R 14	NRSA02J-104X	MG RESISTOR		
	R 15	NRSA02J-332X	MG RESISTOR		
	R 16	NRSA02J-472X	MG RESISTOR		
	R 17	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 18	NRSA02J-102X	MG RESISTOR		
	R 19	NRSA02J-102X	MG RESISTOR		
	R 20	NRSA02J-102X	MG RESISTOR		
	R 21	NRSA02J-562X	MG RESISTOR		
	R 22	NRSA02J-472X	MG RESISTOR		
	R 23	NRSA02J-182X	MG RESISTOR		
	R 24	NRSA02J-103X	MG RESISTOR		
	R 25	NRSA02J-331X	MG RESISTOR		
	R 26	NRSA02J-222X	MG RESISTOR		
	R 27	NRSA02J-103X	MG RESISTOR		
	R 28	NRSA02J-103X	MG RESISTOR		
	R 29	NRSA02J-103X	MG RESISTOR		
	R 30	NRSA02J-122X	MG RESISTOR		
	R 31	NRSA02J-102X	MG RESISTOR		
	R 32	NRSA02J-102X	MG RESISTOR		
	R 33	NRSA02J-331X	MG RESISTOR		
	R 34	NRSA02J-470X	MG RESISTOR		
	R 35	NRSA02J-562X	MG RESISTOR		
	R 36	NRSA02J-332X	MG RESISTOR		
	R 37	NRSA02J-103X	MG RESISTOR		
	R 38	NRSA02J-563X	MG RESISTOR		
	R 39	NRSA02J-563X	MG RESISTOR		
	R 40	NRSA02J-243X	MG RESISTOR		
	R 41	NRSA02J-332X	MG RESISTOR		
	R 60	NRSA02J-0R0X	MG RESISTOR		
	T 1	QQR0793-001	IFT		
	TU 1	QAU0161-001	FRONT END		
	X 1	QAX0402-001	CRYSTAL		

■ Electrical parts list (Tuner board) Ver.U

Block No. 04

⚠	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB21HK-223X	C CAPACITOR		
	C 2	NCB21HK-103X	C CAPACITOR		
	C 3	EETC1CM-106ZJC	E CAPACITOR		
	C 4	NCB21HK-103X	C CAPACITOR		
	C 6	NCB21HK-102X	C CAPACITOR		
	C 7	NCB21HK-102X	C CAPACITOR		
	C 8	NCB21HK-102X	C CAPACITOR		
	C 10	NRSA02J-0R0X	MG RESISTOR		
	C 11	NCB21HK-104X	C CAPACITOR		
	C 12	NCB21HK-473X	C CAPACITOR		
	C 13	NDC21HJ-120X	C CAPACITOR		
	C 14	EETC1AM-107ZJC	E CAPACITOR		
	C 15	NDC21HJ-120X	C CAPACITOR		
	C 16	NDC21HJ-120X	C CAPACITOR		
	C 17	NCB21HK-392X	C CAPACITOR		
	C 18	QENC1HM-474Z	NP E.CAPACITOR	.47MF 20% 50V	
	C 19	NCB21HK-473X	C CAPACITOR		
	C 20	NCB21HK-102X	C CAPACITOR		
	C 21	NCB21HK-223X	C CAPACITOR		
	C 22	NCS21HJ-151X	C CAPACITOR		
	C 23	NCS21HJ-151X	C CAPACITOR		
	C 24	NCS21HJ-151X	C CAPACITOR		
	C 25	EETC1AM-107ZJC	E CAPACITOR		
	C 26	NCB21HK-102X	C CAPACITOR		
	C 27	NCB21HK-102X	C CAPACITOR		
	C 30	EETC1CM-107ZJC	E CAPACITOR		
	C 31	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 32	NCB21HK-473X	C CAPACITOR		
	C 33	NCB21HK-473X	C CAPACITOR		
	C 34	NCB21HK-223X	C CAPACITOR		
	C 35	NCB21HK-473X	C CAPACITOR		
	C 36	EETC1HM-105ZJC	E CAPACITOR		
	C 37	EETC1HM-105ZJC	E CAPACITOR		
	C 38	EETC1HM-224ZJC	E CAPACITOR		
	C 39	EETC1HM-105ZJC	E CAPACITOR		
	C 40	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 41	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 42	NCB21HK-152X	C CAPACITOR		
	C 43	NCB21HK-152X	C CAPACITOR		
	C 44	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 45	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 46	NCB21HK-273X	C CAPACITOR		
	C 47	EETC1HM-105ZJC	E CAPACITOR		
	C 48	NCB21HK-222X	C CAPACITOR		
	C 49	NCS21HJ-471X	C CAPACITOR		
	C 50	QEKC1CM-226Z	E CAPACITOR		
	C 51	QEKC1HM-105Z	E CAPACITOR		
	C 52	QFVJ1HJ-274Z	CAPACITOR	.27MF 5% 50V	
	C 53	EETC1CM-226ZJC	E CAPACITOR		
	C 54	NCB21HK-473X	C CAPACITOR		
	C 57	NCB21HK-102X	C CAPACITOR		
	C 58	NCB21HK-473X	C CAPACITOR		
	C 59	NCB21HK-102X	C CAPACITOR		
	CF 1	VCF2L3B-105Z	CERAMIC FILTER		
	CF 2	VCF2L3B-105Z	CERAMIC FILTER		
	CF 3	QAX0610-001Z	C DISCRIMINATOR		
	CN 1	QGF1205F1-09	CONNECTOR		
	D 1	1SS133-T2	SI DIODE		
	D 2	1SS133-T2	SI DIODE		
	D 3	1SS133-T2	SI DIODE		
	D 4	1SS133-T2	SI DIODE		
	D 11	1SS133-T2	SI DIODE		
	IC 1	LA1838	IC		
	IC 2	LC72136N	IC		
	J 1	QNB0014-001	ANT TERMINAL		
	L 1	QQR0796-001	COIL BLOCK		
	Q 1	2SC2814/4-5/-X	TRANSISTOR		
	Q 5	DTA114YKA-X	TRANSISTOR		
	R 1	QRE141J-560Y	MG RESISTOR	56 5% 1/4W	
	R 2	NRSA02J-331X	MG RESISTOR		
	R 3	NRSA02J-224X	MG RESISTOR		
	R 4	NRSA02J-331X	MG RESISTOR		
	R 5	NRSA02J-560X	MG RESISTOR		
	R 6	NRSA02J-240X	MG RESISTOR		
	R 10	NRSA02J-222X	MG RESISTOR		
	R 13	NRSA02J-103X	MG RESISTOR		
	R 14	NRSA02J-104X	MG RESISTOR		
	R 15	NRSA02J-332X	MG RESISTOR		
	R 16	NRSA02J-472X	MG RESISTOR		
	R 17	QRZ9005-680X	F.RESISTOR	68 1/0W	
	R 18	NRSA02J-102X	MG RESISTOR		
	R 19	NRSA02J-102X	MG RESISTOR		
	R 20	NRSA02J-102X	MG RESISTOR		
	R 21	NRSA02J-562X	MG RESISTOR		
	R 22	NRSA02J-472X	MG RESISTOR		
	R 23	NRSA02J-182X	MG RESISTOR		
	R 24	NRSA02J-103X	MG RESISTOR		
	R 25	NRSA02J-331X	MG RESISTOR		
	R 26	NRSA02J-222X	MG RESISTOR		
	R 27	NRSA02J-103X	MG RESISTOR		
	R 28	NRSA02J-103X	MG RESISTOR		
	R 29	NRSA02J-103X	MG RESISTOR		
	R 30	NRSA02J-122X	MG RESISTOR		
	R 31	NRSA02J-102X	MG RESISTOR		
	R 32	NRSA02J-102X	MG RESISTOR		
	R 33	NRSA02J-331X	MG RESISTOR		
	R 34	NRSA02J-470X	MG RESISTOR		
	R 35	NRSA02J-562X	MG RESISTOR		
	R 36	NRSA02J-332X	MG RESISTOR		
	R 37	NRSA02J-103X	MG RESISTOR		
	R 38	NRSA02J-563X	MG RESISTOR		
	R 39	NRSA02J-563X	MG RESISTOR		
	R 40	NRSA02J-243X	MG RESISTOR		
	R 41	NRSA02J-332X	MG RESISTOR		
	R 60	NRSA02J-0R0X	MG RESISTOR		
	T 1	QQR0793-001	IFT		
	TU 1	QAU0161-001	FRONT END		
	X 1	QAX0402-001	CRYSTAL		

■ Electrical parts list (Tuner board) Ver.B/E/EN

Block No. 05

⚠	Item	Parts number	Parts name	Remarks	Area
	C 1	NCB21HK-223X	C CAPACITOR		
	C 2	NCB21HK-103X	C CAPACITOR		
	C 3	EETC1CM-106ZJC	E CAPACITOR		
	C 4	NCB21HK-103X	C CAPACITOR		
	C 6	NCB21HK-102X	C CAPACITOR		
	C 7	NCB21HK-102X	C CAPACITOR		
	C 8	NCB21HK-102X	C CAPACITOR		
	C 9	NCB21HK-102X	C CAPACITOR		
	C 10	NDC21HJ-120X	C CAPACITOR		
	C 11	NCB21HK-104X	C CAPACITOR		
	C 12	NCB21HK-473X	C CAPACITOR		
	C 13	NDC21HJ-120X	C CAPACITOR		
	C 14	EETC1AM-107ZJC	E CAPACITOR		
	C 15	NDC21HJ-120X	C CAPACITOR		
	C 16	NDC21HJ-120X	C CAPACITOR		
	C 17	NCB21HK-392X	C CAPACITOR		
	C 18	QENC1HM-474Z	NP E.CAPACITOR	.47MF 20% 50V	
	C 19	NCB21HK-473X	C CAPACITOR		
	C 20	NCB21HK-102X	C CAPACITOR		
	C 21	NCB21HK-223X	C CAPACITOR		
	C 22	NCS21HJ-151X	C CAPACITOR		
	C 23	NCS21HJ-151X	C CAPACITOR		
	C 24	NCS21HJ-151X	C CAPACITOR		
	C 25	EETC1AM-107ZJC	E CAPACITOR		
	C 26	NCB21HK-103X	C CAPACITOR		
	C 27	NCB21HK-103X	C CAPACITOR		
	C 30	EETC1CM-107ZJC	E CAPACITOR		
	C 31	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 32	NCB21HK-473X	C CAPACITOR		
	C 33	NCB21HK-473X	C CAPACITOR		
	C 34	NCB21HK-223X	C CAPACITOR		
	C 35	NCB21HK-473X	C CAPACITOR		
	C 36	EETC1HM-105ZJC	E CAPACITOR		
	C 37	EETC1HM-105ZJC	E CAPACITOR		
	C 38	EETC1HM-224ZJC	E CAPACITOR		
	C 39	EETC1HM-105ZJC	E CAPACITOR		
	C 40	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 41	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 42	NCB21HK-182X	C CAPACITOR		
	C 43	NCB21HK-182X	C CAPACITOR		
	C 44	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 45	QETN1CM-106Z	E CAPACITOR	10MF 20% 16V	
	C 46	NCB21HK-223X	C CAPACITOR		
	C 47	EETC1HM-105ZJC	E CAPACITOR		
	C 48	NCB21HK-222X	C CAPACITOR		
	C 49	NCS21HJ-471X	C CAPACITOR		
	C 50	QEKC1CM-226Z	E CAPACITOR	22MF 20% 16V	
	C 51	QEKC1HM-105Z	E CAPACITOR	1.0MF 20% 50V	
	C 52	QFVJ1HJ-274Z	CAPACITOR	.27MF 5% 50V	
	C 53	EETC1CM-226ZJC	E CAPACITOR		
	C 54	NCB21HK-473X	C CAPACITOR		
	C 55	NCS21HJ-330X	C CAPACITOR		
	C 56	NCS21HJ-100X	C CAPACITOR		
	C 57	NCB21HK-102X	C CAPACITOR		
	C 58	NCB21HK-473X	C CAPACITOR		
	C 59	NCB21HK-102X	C CAPACITOR		
	C 70	NCS21HJ-220X	C CAPACITOR		
	C 71	NCS21HJ-220X	C CAPACITOR		
	C 72	NCB21HK-561X	C CAPACITOR		
	C 73	NCB21HK-104X	C CAPACITOR		
	C 74	NCB21HK-104X	C CAPACITOR		
	C 75	EETC1HM-106ZJC	E CAPACITOR		
	C 76	NCB21HK-331X	C CAPACITOR		
	CF 1	QAX0420-001	C FILTER		
	CF 2	QAX0458-001Z	C FILTER		
	CF 3	QAX0610-001Z	C DISCRIMINATOR		
	CN 1	QGF1205F1-13	CONNECTOR		
	D 1	1SS133-T2	SI DIODE		
	D 2	1SS133-T2	SI DIODE		
	D 3	1SS133-T2	SI DIODE		
	D 4	1SS133-T2	SI DIODE		
	D 11	1SS133-T2	SI DIODE		
	IC 1	LA1838	IC		
	IC 2	LC72136N	IC		
	IC 3	LC72723	IC		
	J 1	QNB0014-001	ANT TERMINAL		
	L 1	QQR1094-001	COIL BLOCK		
	L 2	QQL231K-330Y	INDUCTOR		
	L 3	QQL231K-4R7Y	INDUCTOR		
	L 70	QQL231K-101Y	INDUCTOR		
	Q 1	2SC2814/4-5/-X	TRANSISTOR		
	Q 2	2SC2412K/R/-X	TRANSISTOR		
	Q 3	2SC2412K/R/-X	TRANSISTOR		
	Q 4	DTA114YKA-X	TRANSISTOR		
	Q 5	DTA114YKA-X	TRANSISTOR		
	R 2	NRSA02J-331X	MG RESISTOR		
	R 3	NRSA02J-224X	MG RESISTOR		
	R 4	NRSA02J-331X	MG RESISTOR		
	R 5	NRSA02J-560X	MG RESISTOR		
	R 6	NRSA02J-120X	MG RESISTOR		
	R 10	NRSA02J-222X	MG RESISTOR		
	R 11	NRSA02J-472X	MG RESISTOR		
	R 12	NRSA02J-472X	MG RESISTOR		
	R 13	NRSA02J-103X	MG RESISTOR		
	R 14	NRSA02J-104X	MG RESISTOR		
	R 15	NRSA02J-332X	MG RESISTOR		
	R 16	NRSA02J-472X	MG RESISTOR		
	R 17	QRZ9005-680X	F RESISTOR	68 1/0W	
	R 18	NRSA02J-102X	MG RESISTOR		
	R 19	NRSA02J-102X	MG RESISTOR		
	R 20	NRSA02J-102X	MG RESISTOR		
	R 21	NRSA02J-562X	MG RESISTOR		
	R 22	NRSA02J-472X	MG RESISTOR		
	R 23	NRSA02J-182X	MG RESISTOR		
	R 24	NRSA02J-103X	MG RESISTOR		
	R 25	NRSA02J-331X	MG RESISTOR		
	R 26	NRSA02J-222X	MG RESISTOR		
	R 27	NRSA02J-103X	MG RESISTOR		
	R 28	NRSA02J-103X	MG RESISTOR		
	R 29	NRSA02J-103X	MG RESISTOR		
	R 30	NRSA02J-122X	MG RESISTOR		
	R 31	NRSA02J-102X	MG RESISTOR		
	R 32	NRSA02J-102X	MG RESISTOR		
	R 33	NRSA02J-331X	MG RESISTOR		
	R 34	NRSA02J-470X	MG RESISTOR		
	R 35	NRSA02J-562X	MG RESISTOR		
	R 36	NRSA02J-332X	MG RESISTOR		
	R 37	NRSA02J-103X	MG RESISTOR		
	R 38	NRSA02J-393X	MG RESISTOR		
	R 39	NRSA02J-393X	MG RESISTOR		
	R 40	NRSA02J-393X	MG RESISTOR		
	R 41	NRSA02J-332X	MG RESISTOR		
	R 60	NRSA02J-0R0X	MG RESISTOR		
	R 70	NRSA02J-103X	MG RESISTOR		
	R 71	NRSA02J-102X	MG RESISTOR		
	R 72	NRSA02J-102X	MG RESISTOR		
	R 73	NRSA02J-102X	MG RESISTOR		
	T 1	QQR0793-001	IFT		
	TU 1	QAU0160-001	FRONT END		
	X 1	QAX0402-001	CRYSTAL		
	X 70	QAX0263-001Z	CRYSTAL		

■ Electrical parts list (CD servo board) Block No. 06

⚠	Item	Parts number	Parts name	Remarks	Area
	R 673	NRSA02J-102X	MG RESISTOR		
	R 674	NRSA02J-101X	MG RESISTOR		
	R 675	NRSA02J-102X	MG RESISTOR		
	R 676	NRSA02J-102X	MG RESISTOR		
	R 677	NRSA02J-102X	MG RESISTOR		
	R 678	NRSA02J-102X	MG RESISTOR		
	R 679	NRSA02J-102X	MG RESISTOR		
	R 680	NRSA02J-102X	MG RESISTOR		
	R 681	NRSA02J-102X	MG RESISTOR		
	R 682	NRSA02J-102X	MG RESISTOR		
	R 683	NRSA02J-102X	MG RESISTOR		
	R 684	NRSA02J-271X	MG RESISTOR		
	R 685	NRSA02J-102X	MG RESISTOR		
	R 686	NRSA02J-101X	MG RESISTOR		
	R 687	NRSA02J-102X	MG RESISTOR		
	R 688	NRSA02J-101X	MG RESISTOR		
	R 689	NRSA02J-102X	MG RESISTOR		
	R 690	NRSA02J-101X	MG RESISTOR		
	R 691	NRSA02J-101X	MG RESISTOR		
	R 692	NRSA02J-101X	MG RESISTOR		
	R 693	NRSA02J-471X	MG RESISTOR		
	R 694	NRSA02J-102X	MG RESISTOR		
	R 801	NRSA02J-222X	MG RESISTOR		
	R 802	NRSA02J-472X	MG RESISTOR		
	R 803	NRSA02J-123X	MG RESISTOR		
	R 804	NRSA02J-154X	MG RESISTOR		
	R 805	NRSA02J-123X	MG RESISTOR		
	R 806	NRSA02J-223X	MG RESISTOR		
	R 807	NRSA02J-222X	MG RESISTOR		
	R 808	NRSA02J-223X	MG RESISTOR		
	R 811	NRSA02J-473X	MG RESISTOR		
	R 812	NRSA02J-223X	MG RESISTOR		
	R 831	NRSA02J-151X	MG RESISTOR		
	R 832	NRSA02J-103X	MG RESISTOR		
	R 842	NRSA02J-472X	MG RESISTOR		
	R 851	NRSA02J-102X	MG RESISTOR		
	R 852	NRSA02J-102X	MG RESISTOR		
	R 853	NRSA02J-102X	MG RESISTOR		
	R 854	NRSA02J-102X	MG RESISTOR		
	R 855	NRSA02J-102X	MG RESISTOR		
	R 856	NRSA02J-102X	MG RESISTOR		
	R 857	NRSA02J-272X	MG RESISTOR		
	R 859	NRSA02J-181X	MG RESISTOR		
	R 861	NRSA02J-102X	MG RESISTOR		
	R 862	NRSA02J-102X	MG RESISTOR		
	R 863	NRSA02J-102X	MG RESISTOR		
	R 864	NRSA02J-102X	MG RESISTOR		
	R 865	NRSA02J-102X	MG RESISTOR		
	R 866	NRSA02J-102X	MG RESISTOR		
	R 880	NRSA02J-102X	MG RESISTOR		
	R 881	NRSA02J-102X	MG RESISTOR		
	R 882	NRSA02J-102X	MG RESISTOR		
	R 883	NRSA02J-102X	MG RESISTOR		
	R 884	NRSA02J-102X	MG RESISTOR		
	R 885	NRSA02J-102X	MG RESISTOR		
	R 886	NRSA02J-102X	MG RESISTOR		
	R 887	NRSA02J-102X	MG RESISTOR		
	W 601	QUB220-07HPDT	SIN TWIST WIRE	D.GND	
	X 251	QAX0360-001Z	CRYSTAL	FOR IC251	
	X 651	QAX0413-001Z	CRYSTAL	FOR IC651	

■ Electrical parts list (CD select switch board) Block No. 07

⚠	Item	Parts number	Parts name	Remarks	Area
	CN804	QGB2016J1-07	CONNECTOR		
	SW 1	QSW0859-001	DETECT SWITCH		
	SW 2	QSW0859-001	DETECT SWITCH		
	SW 3	QSW0859-001	DETECT SWITCH		
	SW 4	QSW0859-001	DETECT SWITCH		
	SW 5	QSW0859-001	DETECT SWITCH		
	SW 6	QSW0859-001	DETECT SWITCH		

■ Electrical parts list (CD servo board) Block No. 06

⚠	Item	Parts number	Parts name	Remarks	Area
	R 673	NRSA02J-102X	MG RESISTOR		
	R 674	NRSA02J-101X	MG RESISTOR		
	R 675	NRSA02J-102X	MG RESISTOR		
	R 676	NRSA02J-102X	MG RESISTOR		
	R 677	NRSA02J-102X	MG RESISTOR		
	R 678	NRSA02J-102X	MG RESISTOR		
	R 679	NRSA02J-102X	MG RESISTOR		
	R 680	NRSA02J-102X	MG RESISTOR		
	R 681	NRSA02J-102X	MG RESISTOR		
	R 682	NRSA02J-102X	MG RESISTOR		
	R 683	NRSA02J-102X	MG RESISTOR		
	R 684	NRSA02J-271X	MG RESISTOR		
	R 685	NRSA02J-102X	MG RESISTOR		
	R 686	NRSA02J-101X	MG RESISTOR		
	R 687	NRSA02J-102X	MG RESISTOR		
	R 688	NRSA02J-101X	MG RESISTOR		
	R 689	NRSA02J-102X	MG RESISTOR		
	R 690	NRSA02J-101X	MG RESISTOR		
	R 691	NRSA02J-101X	MG RESISTOR		
	R 692	NRSA02J-101X	MG RESISTOR		
	R 693	NRSA02J-471X	MG RESISTOR		
	R 694	NRSA02J-102X	MG RESISTOR		
	R 801	NRSA02J-222X	MG RESISTOR		
	R 802	NRSA02J-472X	MG RESISTOR		
	R 803	NRSA02J-123X	MG RESISTOR		
	R 804	NRSA02J-154X	MG RESISTOR		
	R 805	NRSA02J-123X	MG RESISTOR		
	R 806	NRSA02J-223X	MG RESISTOR		
	R 807	NRSA02J-222X	MG RESISTOR		
	R 808	NRSA02J-223X	MG RESISTOR		
	R 811	NRSA02J-473X	MG RESISTOR		
	R 812	NRSA02J-223X	MG RESISTOR		
	R 831	NRSA02J-151X	MG RESISTOR		
	R 832	NRSA02J-103X	MG RESISTOR		
	R 842	NRSA02J-472X	MG RESISTOR		
	R 851	NRSA02J-102X	MG RESISTOR		
	R 852	NRSA02J-102X	MG RESISTOR		
	R 853	NRSA02J-102X	MG RESISTOR		
	R 854	NRSA02J-102X	MG RESISTOR		
	R 855	NRSA02J-102X	MG RESISTOR		
	R 856	NRSA02J-102X	MG RESISTOR		
	R 857	NRSA02J-272X	MG RESISTOR		
	R 859	NRSA02J-181X	MG RESISTOR		
	R 861	NRSA02J-102X	MG RESISTOR		
	R 862	NRSA02J-102X	MG RESISTOR		
	R 863	NRSA02J-102X	MG RESISTOR		
	R 864	NRSA02J-102X	MG RESISTOR		
	R 865	NRSA02J-102X	MG RESISTOR		
	R 866	NRSA02J-102X	MG RESISTOR		
	R 880	NRSA02J-102X	MG RESISTOR		
	R 881	NRSA02J-102X	MG RESISTOR		
	R 882	NRSA02J-102X	MG RESISTOR		
	R 883	NRSA02J-102X	MG RESISTOR		
	R 884	NRSA02J-102X	MG RESISTOR		
	R 885	NRSA02J-102X	MG RESISTOR		
	R 886	NRSA02J-102X	MG RESISTOR		
	R 887	NRSA02J-102X	MG RESISTOR		
	W 601	QUB220-07HPDT	SIN TWIST WIRE	D.GND	
	X 251	QAX0360-001Z	CRYSTAL	FOR IC251	
	X 651	QAX0413-001Z	CRYSTAL	FOR IC651	

■ Electrical parts list (CD select switch board) Block No. 07

⚠	Item	Parts number	Parts name	Remarks	Area
	CN804	QGB2016J1-07	CONNECTOR		
	SW 1	QSW0859-001	DETECT SWITCH		
	SW 2	QSW0859-001	DETECT SWITCH		
	SW 3	QSW0859-001	DETECT SWITCH		
	SW 4	QSW0859-001	DETECT SWITCH		
	SW 5	QSW0859-001	DETECT SWITCH		
	SW 6	QSW0859-001	DETECT SWITCH		

■ Electrical parts list
(Head amplifier& mechanism control board)

Block No. 08

⚠	Item	Parts number	Parts name	Remarks	Area
	C 101	NCS21HJ-561X	C CAPACITOR		
	C 102	NCS21HJ-331X	C CAPACITOR		
	C 103	NCS21HJ-561X	C CAPACITOR		
	C 104	NCS21HJ-221X	C CAPACITOR		
	C 105	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V	
	C 106	NCB21HK-333X	C CAPACITOR		
	C 107	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 108	NCB21HK-393X	C CAPACITOR		
	C 110	NCS21HJ-221X	C CAPACITOR		
	C 111	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
	C 112	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 113	NCB21HK-332X	C CAPACITOR		
	C 114	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 115	NCB21HK-153X	C CAPACITOR		
	C 116	NCB21HK-822X	C CAPACITOR		
	C 117	NCB21HK-223X	C CAPACITOR		
	C 119	NCB21HK-563X	C CAPACITOR		
	C 120	NCS21HJ-330X	C CAPACITOR		
	C 201	NCS21HJ-561X	C CAPACITOR		
	C 202	NCS21HJ-331X	C CAPACITOR		
	C 203	NCS21HJ-561X	C CAPACITOR		
	C 204	NCS21HJ-221X	C CAPACITOR		
	C 205	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V	
	C 206	NCB21HK-333X	C CAPACITOR		
	C 207	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 208	NCB21HK-393X	C CAPACITOR		
	C 210	NCS21HJ-221X	C CAPACITOR		
	C 211	QEK41HM-104	E CAPACITOR	.10MF 20% 50V	
	C 212	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 213	NCB21HK-332X	C CAPACITOR		
	C 214	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 215	NCB21HK-153X	C CAPACITOR		
	C 216	NCB21HK-822X	C CAPACITOR		
	C 217	NCB21HK-223X	C CAPACITOR		
	C 219	NCB21HK-563X	C CAPACITOR		
	C 220	NCS21HJ-330X	C CAPACITOR		
	C 301	QEK41CM-106	E CAPACITOR	10MF 20% 16V	
	C 302	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 303	QEK41CM-226	E CAPACITOR	22MF 20% 16V	
	C 304	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 305	NCB21HK-393X	C CAPACITOR		
	C 306	QEK40JM-227	E CAPACITOR	220MF 20% 6.3V	
	C 308	NCB21HK-562X	C CAPACITOR		
	C 309	NCB21HK-562X	C CAPACITOR		
	C 310	NCB21HK-223X	C CAPACITOR		
	C 311	NCB21HK-682X	C.CAPACITOR		
	C 313	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 314	QCZ0205-155Z	ML C CAPACITOR	1.5MF	
	C 315	QCZ0205-155Z	ML C CAPACITOR	1.5MF	
	C 316	QFG32AJ-103Z	PP CAPACITOR	.010MF 5% 100V	
	C 318	NCB21HK-103X	C CAPACITOR		
	C 319	QFG32AJ-821Z	TF CAPACITOR	820PF 5% 100V	
	C 321	NCB21HK-103X	C CAPACITOR		
	C 322	QFG32AJ-152Z	M CAPACITOR	1500PF 5% 100V	
	C 327	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 328	NCS21HJ-151X	C CAPACITOR		
	C 329	NCS21HJ-151X	C CAPACITOR		
	C 330	NCS21HJ-151X	C CAPACITOR		
	C 332	NCS21HJ-151X	C CAPACITOR		
	C 335	NCB21HK-103X	C CAPACITOR		
	C 336	NCB21HK-103X	C CAPACITOR		
	C 337	NCB21HK-103X	C CAPACITOR		
	C 338	NCB21HK-103X	C CAPACITOR		
	C 339	QEK41CM-476	E CAPACITOR	47MF 20% 16V	
	C 340	NCB21HK-103X	C CAPACITOR		
	C 341	QEKJ1AM-107Z	E CAPACITOR	100MF 20% 10V	
	C 342	QEK41EM-475	E CAPACITOR	4.7MF 20% 25V	
	C 343	QET41CM-106	E CAPACITOR	10MF 20% 16V	
	C 344	NCB21HK-472X	C CAPACITOR		
	C 345	NCS21HJ-331X	C CAPACITOR		
	C 350	QFLM1HJ-102Z	M CAPACITOR	1000PF 5% 50V	
	CN301	QGF1205F1-06	CONNECTOR		
	CN302	QGF1205F1-06	CONNECTOR		
	CN303	QGB2011M1-10	B TO B CONNECTO		
	CN304	QGB2011M1-10	B TO B CONNECTO		
	CN305	QGF1205F1-10	CONNECTOR		
	CN306	QGF1205F1-11	CONNECTOR		
	D 307	HZM5.1NB2-X	CHIP Z DIODE CM		
	D 308	HZM5.1NB2-X	CHIP Z DIODE CM		
	D 309	MA704A-X	S.K.DIODE		
	IC301	BA3126N	IC		
	IC302	AN7345K	IC		
	IC303	BU4094BCF-X	IC		
	IC304	BU4094BCF-X	IC		
	L 202	QQR0779-001Z	INDUCTOR	EMC	
	L 301	QQR0620-001	OSC COIL(BIAS)		
	L 303	QQL01BK-100Z	INDUCTOR		
	Q 102	DTC144TKA-X	TRANSISTOR		
	Q 103	DTC144EKA-X	TRANSISTOR		
	Q 105	2SC3576-JVC-T	TRANSISTOR		
	Q 202	DTC144TKA-X	TRANSISTOR		
	Q 203	DTC144EKA-X	TRANSISTOR		
	Q 205	2SC3576-JVC-T	TRANSISTOR		
	Q 302	2SC2001/K/-T	TRANSISTOR		
	Q 303	2SC2001/K/-T	TRANSISTOR		
	Q 304	2SC3576-JVC-T	TRANSISTOR		
	Q 305	2SC3576-JVC-T	TRANSISTOR		
	Q 306	2SC2412K/RS/-X	CHIP TRANSISTOR		
	Q 307	2SC2412K/RS/-X	CHIP TRANSISTOR		
	Q 308	2SC2412K/RS/-X	CHIP TRANSISTOR		
	Q 309	2SC2412K/RS/-X	CHIP TRANSISTOR		
	Q 312	2SB562/C/-T	TRANSISTOR		
	Q 313	2SC2412K/RS/-X	CHIP TRANSISTOR		
	Q 314	2SB562/C/-T	TRANSISTOR		
	Q 315	2SC2412K/RS/-X	CHIP TRANSISTOR		
	Q 316	2SA952/LK/-T	TRANSISTOR		
	Q 317	DTC124EKA-X	TRANSISTOR		
	Q 321	DTC144EKA-X	TRANSISTOR		
	Q 322	DTC144EKA-X	TRANSISTOR		
	Q 323	2SC2412K/RS/-X	CHIP TRANSISTOR		
	R 102	NRSA02J-102X	MG RESISTOR		
	R 103	NRSA02J-183X	MG RESISTOR		
	R 105	NRSA02J-220X	MG RESISTOR		
	R 106	NRSA02J-392X	MG RESISTOR		
	R 107	NRSA02J-123X	MG RESISTOR		
	R 108	NRSA02J-222X	MG RESISTOR		
	R 109	NRSA02J-152X	MG RESISTOR		
	R 111	NRSA02J-562X	MG RESISTOR		
	R 112	NRSA02J-122X	MG RESISTOR		
	R 113	NRSA02J-271X	MG RESISTOR		
	R 114	NRSA02J-391X	MG RESISTOR		
	R 115	NRSA02J-332X	MG RESISTOR		
	R 117	NRSA02J-332X	MG RESISTOR		
	R 118	NRSA02J-152X	MG RESISTOR		
	R 119	NRSA02J-203X	MG RESISTOR		
	R 120	NRSA02J-102X	MG RESISTOR		
	R 121	NRSA02J-122X	MG RESISTOR		
	R 202	NRSA02J-102X	MG RESISTOR		
	R 203	NRSA02J-183X	MG RESISTOR		
	R 205	NRSA02J-220X	MG RESISTOR		
	R 206	NRSA02J-392X	MG RESISTOR		
	R 207	NRSA02J-123X	MG RESISTOR		
	R 208	NRSA02J-222X	MG RESISTOR		
	R 209	NRSA02J-152X	MG RESISTOR		
	R 211	NRSA02J-562X	MG RESISTOR		
	R 212	NRSA02J-122X	MG RESISTOR		
	R 213	NRSA02J-271X	MG RESISTOR		
	R 214	NRSA02J-391X	MG RESISTOR		
	R 215	NRSA02J-332X	MG RESISTOR		
	R 217	NRSA02J-332X	MG RESISTOR		
	R 218	NRSA02J-152X	MG RESISTOR		
	R 219	NRSA02J-203X	MG RESISTOR		
	R 220	NRSA02J-102X	MG RESISTOR		
	R 221	NRSA02J-122X	MG RESISTOR		

■Electrical parts list (Head amplifier& mechanism control board) Block No. 08

⚠	Item	Parts number	Parts name	Remarks	Area
	R 301	NRS181J-221X	MG RESISTOR		
	R 302	NRS181J-101X	MG RESISTOR		
	R 304	NRSA02J-393X	MG RESISTOR		
	R 305	NRSA02J-103X	MG RESISTOR		
	R 306	NRSA02J-103X	MG RESISTOR		
	R 307	NRSA02J-103X	MG RESISTOR		
	R 308	NRSA02J-152X	MG RESISTOR		
	R 309	NRSA02J-152X	MG RESISTOR		
	R 310	NRS181J-820X	MG RESISTOR		
	R 311	NRS181J-820X	MG RESISTOR		
	R 313	NRSA02J-3R3X	MG RESISTOR		
	R 314	NRSA02J-223X	MG RESISTOR		
	R 315	NRSA02J-100X	MG RESISTOR		
	R 316	NRSA02J-223X	MG RESISTOR		
	R 317	NRSA02J-100X	MG RESISTOR		
	R 318	NRSA02J-123X	MG RESISTOR		
	R 319	NRSA02J-152X	MG RESISTOR		
	R 321	NRSA02J-123X	MG RESISTOR		
	R 322	NRSA02J-152X	MG RESISTOR		
	R 327	NRSA02J-474X	MG RESISTOR		
	R 328	NRSA02J-222X	MG RESISTOR		
	R 329	NRSA02J-222X	MG RESISTOR		
	R 330	NRSA02J-0R0X	MG RESISTOR		
	R 335	NRSA02J-222X	MG RESISTOR		
	R 336	NRSA02J-392X	MG RESISTOR		
	R 338	NRSA02J-222X	MG RESISTOR		
	R 339	NRSA02J-222X	MG RESISTOR		
	R 341	NRSA02J-222X	MG RESISTOR		
	R 343	NRSA02J-0R0X	MG RESISTOR		
	R 345	NRSA02J-222X	MG RESISTOR		
	R 346	NRSA02J-0R0X	MG RESISTOR		
	R 347	NRSA02J-392X	MG RESISTOR		
	R 348	NRSA02J-222X	MG RESISTOR		
	R 350	NRSA02J-472X	MG RESISTOR		
	R 351	NRSA02J-151X	MG RESISTOR		
	R 353	NRSA02J-472X	MG RESISTOR		
	R 354	NRSA02J-151X	MG RESISTOR		
	R 355	NRSA02J-332X	MG RESISTOR		
	R 357	NRSA02J-103X	MG RESISTOR		
	R 358	NRSA02J-222X	MG RESISTOR		
	R 359	NRSA02J-123X	MG RESISTOR		
	R 360	NRSA02J-433X	MG RESISTOR		
	R 361	NRSA02J-183X	MG RESISTOR		
	R 362	NRSA02J-123X	MG RESISTOR		
	R 363	NRSA02J-183X	MG RESISTOR		
	R 364	NRSA02J-433X	MG RESISTOR		
	R 365	NRSA02J-203X	MG RESISTOR		
	R 366	NRSA02J-123X	MG RESISTOR		
	R 367	NRSA02J-102X	MG RESISTOR		
	R 368	NRSA02J-391X	MG RESISTOR		
	R 369	NRSA02J-391X	MG RESISTOR		
	R 371	NRS181J-222X	MG RESISTOR		
	R 374	NRSA02J-912X	MG RESISTOR		
	R 375	NRSA02J-683X	MG RESISTOR		
	R 376	NRS181J-6R8X	MG RESISTOR		
	VR10	QVP0008-503Z	SEMI V RESISTOR		
	VR20	QVP0008-503Z	SEMI V RESISTOR		
	VR30	QVP0008-103Z	SEMI V RESISTOR		
	WIRE	EWR34D-10CS	FLAT WIRE		

■Electrical parts list (Cassette switch board) Block No. 09

⚠	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGB2011L1-10	B TO B CONNECTO		
	D 1	1SR139-400-T2	SI DIODE		
	IC 1	SG-105F3-BB,C	PHOTO SENSER		
	P 1	QNZ0104-001	POST PIN		
	SW 2	QSW0832-001	LEAF SWITCH	TAPE	
	SW 4	QSW0832-001	LEAF SWITCH	70U	
	SW 6	QSW0507-001	SWITCH		

■Electrical parts list (Cassette switch board) Block No. 10

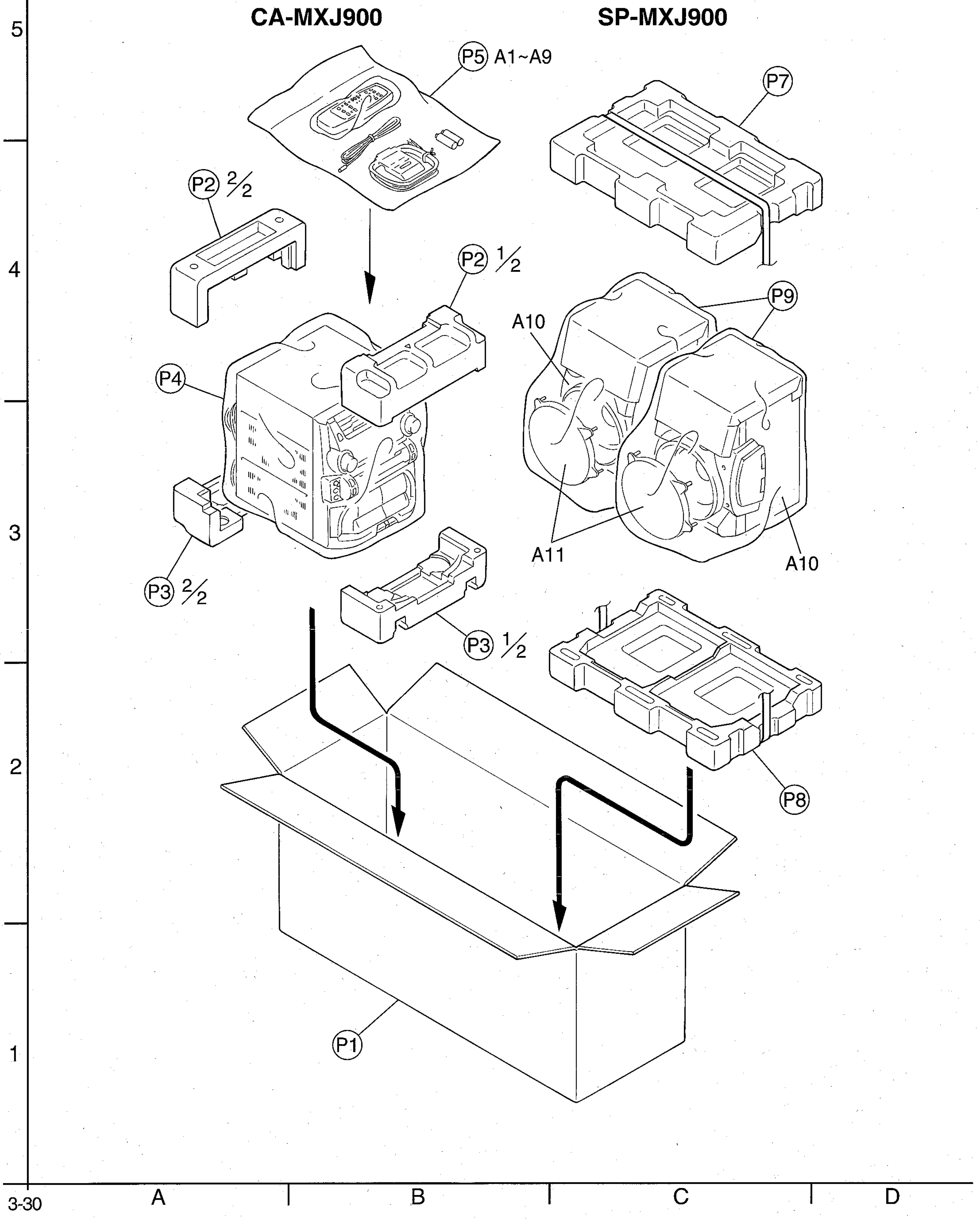
⚠	Item	Parts number	Parts name	Remarks	Area
	CN 1	QGB2011L1-10	B TO B CONNECTO		
	D 1	1SR139-400-T2	SI DIODE		
	IC 1	SG-105F3-BB,C	PHOTO SENSER		
	P 1	QNZ0104-001	POST PIN		
	SW 1	QSW0832-001	LEAF SWITCH	R.REC	
	SW 2	QSW0832-001	LEAF SWITCH	TAPE	
	SW 4	QSW0832-001	LEAF SWITCH	70U	
	SW 5	QSW0832-001	LEAF SWITCH	F.REC	
	SW 6	QSW0507-001	SWITCH		

Packing materials and accessories parts list

Block No. M 5 M M

Block No. M 6 M M

MX-J900


CA-MXJ900
SP-MXJ900
P5 A1~A9
P7
P2 2/2
P2 1/2
P9
A10
P4
A11
A10
P3 2/2
P3 1/2
P8
P1
5
4
3
2
1
A
B
C
D

■ Packing parts list (MX-J900)

Block No. M5MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	GV20084-001A	PACKING CASE	1		
	P 2	GV10036-001A	TOP CUSHION	1		
	P 3	GV10037-001A	BOTTOM CUSHION	1		
	P 4	QPC06507015P	POLY BAG	1		
	P 5	QPC02503515P	POLY BAG	1		
	P 7	720-TJ900J-00	TOP CUSHION	1	FOR SPEAKER	
	P 8	720-BJ900J-00	BOTTOM CUSHION	1	FOR SPEAKER	
	P 9	700-120052-10	POLY BAG	2	FOR SPEAKER	

■ Accessories parts list (MX-J900)

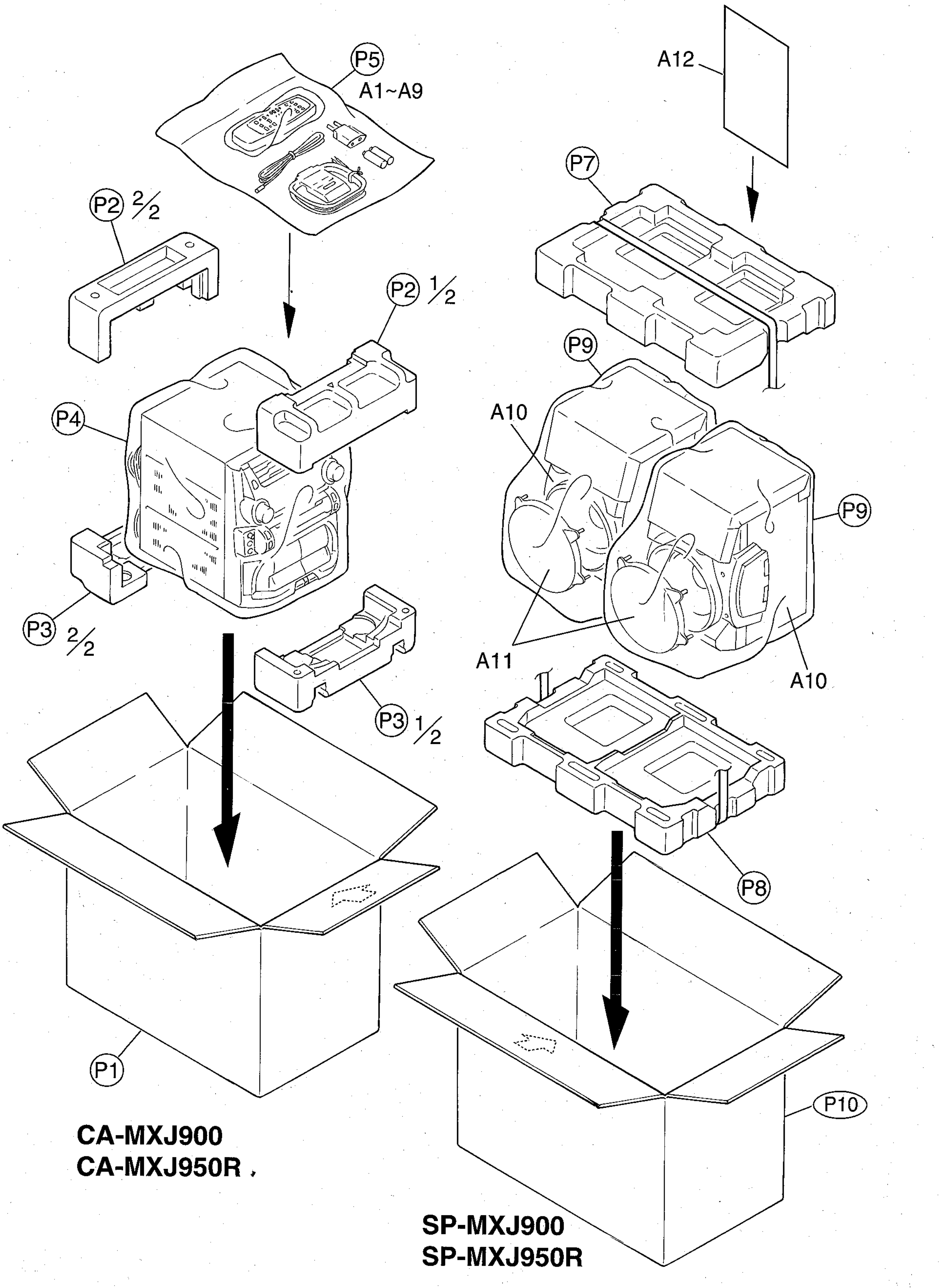
Block No. M6MM

⚠	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	GVT0037-001A	INST BOOK	1	ENG	J
		GVT0037-002A	INST BOOK	1	ENG,FRE	C
	A 2	BT-52004-1	WARRANTY CARD	1		C
	A 3	BT-51020-2	REGIST CARD	1		J
	A 4	BT-20071B	JVC CENTER LIST	1		C
	A 5	QAL0014-001	AM LOOP ANT	1		
	A 6	EWP503-001	ANT.WIRE	1		
	A 8	---------------	BATTERY	1		
	A 9	RM-SMXJ900J	REMOCON	1		
	A 10	MXJ900K-SPBOX-R	SPEAKER BOX(R)	1		
		MXJ900K-SPBOX-L	SPEAKER BOX(L)	1		
	A 11	201-00J900-10	SPEAKER NET	2		

Packing materials and accessories parts list

Block No. M 7 M M
Block No. M 8 M M

CA-MXJ900/SP-MXJ900
CA-MXJ950R/SP-MXJ950R


P5
A1~A9
A12
P7
P2 2/2
P2 1/2
P9
A10
P4
P9
P3 2/2
A11
A10
P3 1/2
P8
P1
P10

CA-MXJ900
CA-MXJ950R

SP-MXJ900
SP-MXJ950R

5
4
3
2
1
A
B
C
D

■ Packing parts list (CA-MXJ900/CA-MXJ950R/SP-MXJ900/SP-MXJ950R) Block No. M7MM

A	Item	Parts number	Parts name	Q'ty	Description	Area
	P 1	GV10042-002A	PACKING CASE	1	CA-MXJ900	
		GV10042-003A	PACKING CASE	1	CA-MXJ950R	
	P 2	GV10034-001A	UPPER CUSHION	1		
	P 3	GV10035-001A	BOTTOM CUSHION	1		
	P 4	QPC06507015P	POLY BAG	1		
	P 5	QPC02503515P	POLY BAG	1		
	P 7	720-TJ900U-00	UPPER CUSHION	1	SP-MXJ900/SP-MXJ950R	
	P 8	720-BJ900U-00	BOTTOM CUSHION	1	SP-MXJ900/SP-MXJ950R	
	P 9	700-120052-10	POLY BAG	2	SP-MXJ900/SP-MXJ950R	
	P 10	730-00J900-10	PACKING CASE	1	SP-MXJ900	
		730-00J950-10	PACKING CASE	1	SP-MXJ950R	

■ Accessories parts list (CA-MXJ900/CA-MXJ950R/SP-MXJ900/SP-MXJ950R) Block No. M8MM

A	Item	Parts number	Parts name	Q'ty	Description	Area
	A 1	GVT0037-003A	INSTRUCTION BOOK	1	ENG,SPA,POR,CHI,ARA	U
		GVT0037-008A	INSTRUCTION BOOK	1	ENG	B
		GVT0037-006A	INSTRUCTION BOOK	1	ENG,GER,FRE,DUT,SPA,ITA	E
		GVT0037-007A	INSTRUCTION BOOK	1	GER,FRE,DUT,SWE,DAN,FIN	EN
	A 2	BT-54013-1	WARRANTY CARD	1		B,E,EN
		BT-56004-6	WARRANTY CARD	1		U
	A 3	VNA3000-202	REGISTER CARD	1		B
	A 5	QAL0014-001	AM LOOP ANT	1		
	A 6	EWP503-001	ANT.WIRE	1		
	A 7	QAM0112-001	AC PLUG ADAPTER	1		
	A 8	--------------	BATTERY	1		
	A 9	RM-SMXJ900U	REMOCON	1	CA-MXJ900	
		RM-SMXJ950R	REMOCON	1	CA-MXJ950R	
	A 10	MXJ900K-SPBOX-L	SPEAKER BOX(L)	1	SP-MXJ900/SP-MXJ950R	
		MXJ900K-SPBOX-R	SPEAKER BOX(R)	1	SP-MXJ900/SP-MXJ950R	
	A 11	201-00J900-10	SPEAKER NET	2	SP-MXJ900/SP-MXJ950R	
	A 12	GVT0040-001A	INST.BOOK(SP-MXJ900)	1	ENG,SPA,POR,CHI,ARA	
		GVT0041-001A	INST.BOOK(SP-MXJ950R)	1	ENG,GER,FRE,DUT,SPA,ITA SWE,FIN,DAN	